Issue 86 ■ May ■ 1995 ■ £3.99 *Overseas price £4.25 Hfl 18.95*

FREE CD!
Compatible with all Amigas including CD32

AMIGA COMPUTING

May 1995
AMIGA COMPUTING
All Amigas 1Mb required

Smarty Paints



Feature packed and extremely versatile, this unique art package caters for all age groups and abilities

COMPLETE PROGRAM Worth £30



World exclusive!

Lightwave 4: AC takes the first look at the ultimate in rendering and animation

PLUS

- Cross Mac
- Aminet 1
- DPaint 5
- Easy Ledgers
- Cobra 275Mhz
- 3D Digitiser
- Squirrel
- CanDo 3
- Internet Add-ons
- Office round-up

IMAGES • COLOURED CLIP ART • FONTS • SOUND SAMPLES • UTILITIES • MUSIC

The Weird Science Multimedia Toolkit

AMIGA COMPUTING

Images
500 Ham images
500 24-bit
500 Ham8

Clip art
2100 mono files
1300 colour files

Audio
750 music modules
2300 sound samples

Fonts
120 bitmapped Amiga fonts
100 colour fonts
100 Adobe fonts
80 PostScript

Plus 79 Compugraphic fonts & scalable clip art

Plus: Also includes all the utilities, viewers and support files needed to make the most of this amazing CD Compatible with all Amigas – including CD32!

The first Amiga magazine to bring you a useful CD!

IDG MEDIA

9 770959 963077 05

iNDi DIRECT & CALCULUS Stores

OPTIONS

*ALL INDI PRODUCTS ARE DELIVERED FREE OF CHARGE

Buying Mail Order is convenient and the prices are great. But sometimes it is important to actually see the product and take it away the same day. That's where our new Options scheme comes in. iNDi Mail Order or a visit to one of our Calculus Stores, the choice is yours. The same quality Service and with this Exclusive reader offer, Calculus will match any iNDi Mail Order price on the Spot. Add No Deposit Credit and Nothing to pay for 6 Months and we believe that this is the most exciting offer anywhere.

ORDER ANY iNDi ADVERTISED PRODUCT OVER £100, USE IT FOR 6 MONTHS BEFORE YOU PAY A PENNY

Option 1	Option 2
BUY TODAY FROM EITHER INDI OR CALCULUS. PAY BY CHEQUE OR CREDIT CARD	BUY TODAY FROM EITHER INDI OR CALCULUS WITH NOTHING TO PAY FOR 6 MONTHS THEN CHOOSE TO PAY OVER 6 TO 36 MONTHS.

TO OBTAIN INDI PRICES YOU MUST SHOW A COPY OF THIS ADVERT

INSTANT CREDIT AVAILABLE FROM NEARLY 100 OFFICES NATIONWIDE

CREDIT CARDS

Access SWITCH VISA

EXPRESS CHEQUE CLEARANCE

Simply write your cheque guarantee card number, name and address on the back of your cheque and we will normally be able to despatch your order the day that we receive your cheque. Cheques, received without a cheque guarantee card number, will normally clear within a maximum 7 working days.

CUSTOMER CARE

The substantial volume of sales calls comming into our office has resulted in delays in the crucial area of customer care. To ensure that all customer queries are handled speedily and efficiently a new customer care department has been established. Our new department will be happy to assist you on their new number **01543 419921**
Mon -Fri 10am-4pm

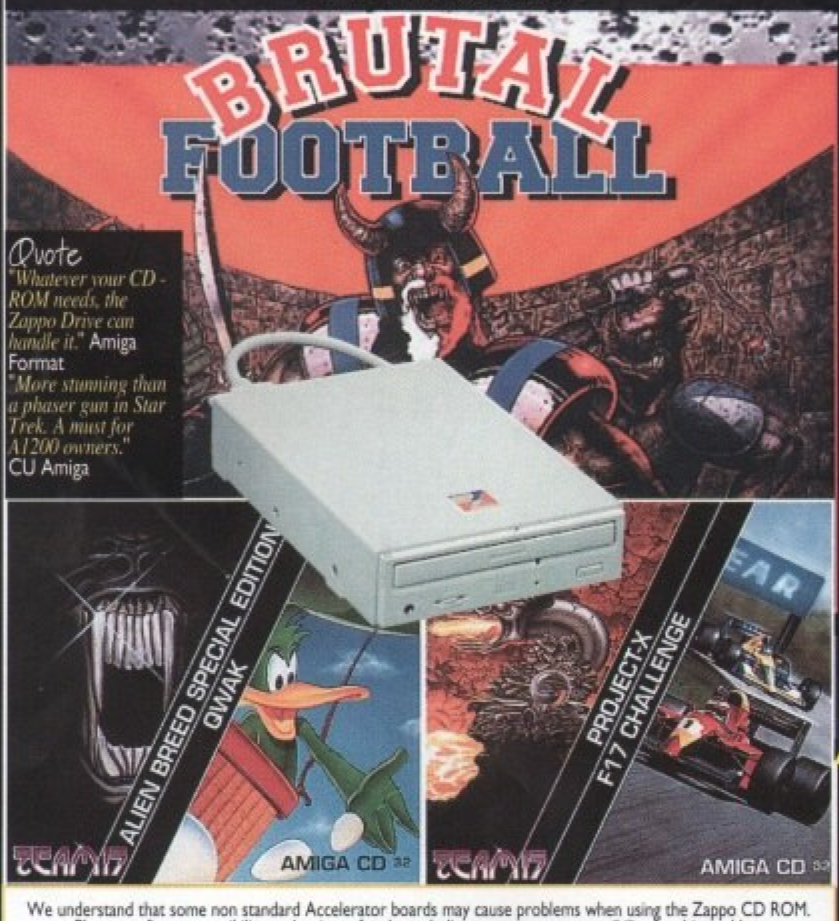
01543 419999
9am - 6pm Monday to Friday 9.30am - 3.30 Saturday

* APR 29.8% Subject to Status.

WITH THE PRICE OF CD ROM'S GOING DOWN IN PRICE INDI AND CALCULUS CAN PASS THE BENEFIT DOWN TO YOU.

ZAPPO AMIGA 1200 CD ROM DRIVE

LIMITED EDITION PACK



We understand that some non standard Accelerator boards may cause problems when using the Zappo CD ROM. Please confirm compatibility at the time of order as Indi cannot accept responsibility for this problem

5 GREAT GAMES WORTH £60.00

* **Brutal Football** "It is first rate ... it'll keep you in stitches for months" 94%
* **Alien Breed** "A supreme challenge to new and old players alike" 90%
* **Qwak** "The most playable Amiga game ever" 92%
* **Project - X** "Incredible graphics, awesome speech...a true classic" 92%
* **F17 Challenge** "fast moving graphics, excellent gameplay... a game to be reckoned with" 84%

(MIN 3MB MEMORY REQUIRED)

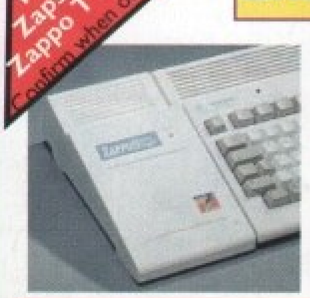
PLUS a superb multi button, joypad worth £14.99

ZAPPO CD ROM DRIVE Limited Edition

£199.99 SPECIAL PRICE

FREE Zapsac or Zappo T Shirt Confirm when ordering

ZAPPO Smart Storplus



Plugs into the PCMCIA Slot of the Amiga 600 &1200 and is ready to go. Excellent build quality at an amazing price.
12 Months Warranty

130Mb---	£149.99
214Mb---	£189.99
270Mb---	£204.99
540Mb---	£259.99

DRIVES HAVE COME DOWN SO INDI PASS THE ADVANTAGE ONTO YOU

2.5" INTERNAL HARD DRIVE PRICES

The massive reduction in hard drive prices has forced us to reconsider our position and stock 2.5" drives

170 Mb	£159.99
260 Mb	£252.50
420 Mb	£269.99
540 Mb	£402.50

Complete with installation disk and lead

AMIGA 600 HARD DRIVE
30 Mb £49.99
Includes Trivial Persuits, Myst, Rome A.D. 92, Epic

MICROVITEC MONITORS



This superb monitor offers a high quality 0.28 dot pitch and low radiation total MPR-II compliance. Complete with external Stereo Speakers and includes all leads - this is the monitor that we have all been waiting for.

£279.99

SHARP MONITOR / TV



The superb Sharp 14" Monitor / TV provides a real alternative to a Commodore Monitor with full function remote control 39 channel electronic auto search tuning, digital on screen display and 1.5 watt Mpo audio output. All you need to know is the low low price. The Sharp Monitor / TV is the product for you complete with scart socket and connectivity cable and including 12 months Warranty.

£164.99

* A copy of this advert to is required to obtain our Mail Order Prices at Calculus Stores. Prices valid until 19th May 1995.Some Calculus Stores may not carry the full Indi Range. Phone to avoid disappointment.
* Insured deliveries by securicor are delivered Free of Charge Monday to Friday. A surcharge of £10 is required on a Saturday.(Uk Mainland) Prices are subject to change without prior notice

MAIL ORDER SALES HOTLINE 0543 419999

INDI DIRECT & CALCULUS Stores

OPTIONS

INCLUDES WORDWORTH THE ULTIMATE WORD PROCESSING PACKAGE

*ALL INDI PRODUCTS ARE DELIVERED FREE OF CHARGE

NEW Panasonic KX-P2135

A 24 Pin Quiet colour printer, designed for those who need low cost professional quality output, giving all your documents and presentations eye catching colour. The NEW KX-P2135 incorporates a 20 page built in sheetfeeder, a flat belt push tractor feed to facilitate easy loading together with a noise level of only 46.5dBa (43.5dBa in super quiet mode)

* Quiet Printing 46.5 dBa - 43.5 dBa SQ Mode
* Multiple font capabilities including 3 draft and 7 letter quality
* Tractor feed
* 2 paper paths
* 7 Colour printing
* 250 cps Draft Micron, 83 cps LQ
* 1 Year Warranty

FREEPHONE 0800 444220 for your FREE Amiga Driver Disk



£164.99

Please note all Panasonic Dot - Matrix printers are supplied with a tractor feed, FREE of Charge. Other Companies can charge approximately £50 extra for this feature.

PRINTER ACCESSORIES

1) **Printer Dust Cover** Tailored dust cover for the Panasonic KX-2123 printer	**INDI PRICE £11.49**
2) **Paper Pack** -500 sheets of quality A4 paper	**INDI PRICE £12.49**
3) **Continuous Paper** 2000 sheets 1 part listing paper	**INDI PRICE £22.49**
4) **Parallel Printer Cable** -Used for connecting Amiga to Panasonic printers	**INDI PRICE£11.49**
5) **Panasonic Colour Ribbon** -Colour ribbon for KX-P2123	**INDI PRICE £15.49**
6) **Panasonic Black Ribbon** Black ribbon for KX-P2123	**INDI PRICE £9.49**

MBX 1230 XA 50 MHz 50 MHz 68030 & MMU

* Allows your A1200 to run 1.52 times faster than a A4000 / 030
* Easy trap door installation (No soldering required)* Fast RAM upgradable to 128 Mb (72 pin 32 bit) * On board battery backed clock
* Does not interfere with PCMCIA port

50mhz £204.99 50mhz +50mhz FPU £234.99

NEC Printer

NEC PINWRITER P2Q

New to the Calculus Printer Range the NEC P2Q takes 24 pin dot matrix technology to its limit offering a real cost effective solution to the home or small office user * Flexible paper handling, bottom fed continuous, multipart cut sheet and envelopes * 16K print buffer * 96 CPS in letter mode and a superfast 192 CPS in draft mode. * < 48dBA accoustic noise * Paper Parking * Manual Feed slot

£124.99



AMIGA REPLACEMENT FLOPPY DRIVES

Amiga 500 / 500+
Amiga 600 / 1200 **£39.99**

Commodore 601

Trapdoor upgrade for the Amiga 600, 512K **£22.49**

DO YOU OWN AN AMIGA A1500 / A2000 / A3000 Or A4000

2091 SCSI CONTROLLER CARD

* 6.6 Roms for use in the A4000 * Upto 2Mb of 16 bit dips can be fitted
* Any 3.5" SCSI Hard Drive can be fitted
* Install software for SCSI Hard Drive Any other standard SCSI device can be added
* Tape streamer * SCSI Scanner
* External Hard Drive

£69.99

256K DRAM memory **£4.49**

Canon PRINTERS

NEW Canon BJ-200ex

The NEW BJ-200ex has print speeds of over 3ppm, it incorporates and in built 'smoothing' function giving and effective resolution of upto 720 x 360 dpi! At the faster speeds of 204cps HQ, and 248cps HS. The BJ-200ex still maintains the whisper quiet operation of 42 dBA, and of course the built - in 100 x A4 automatic sheetfeeder.

NEW £233.83

Canon BJC-4000

* Colour desktop bubble jet with Separate CMYK ink tanks *360 DPI, 720 with black only *248 cps HS, 173 CPS HQ,(BC-20 opt.)496 CPS HS, 346HQ * Prints on media * Built in Sheetfeeder *Windows compatible * 8 standard typefaces * 1 year Canon Warranty

£351.33

Canon BJC-600

* Windows compatible *Fast print speeds for colour and black *Separate CMYK ink tanks* 8 resident typefaces, 20 truetype fonts * Prints on various media * 1 Year Warranty

£413.60

SX-1

CD32 EXPANSION MODULE

The Amazing SX - 1 Module simply slots into the back of your Amiga CD32 and a whole world of expansion opens up for you. Add a keyboard, floppy drive or even fit a superfast hard drive. Instantly your CD32 is no mere console, it's a real computer.

FREE FRED FISH
SX-1 EXPANSION MODULE
£199.99

EXPANSION OPTIONS

BLACK KEYBOARD **£42.99**
ZAPPO FLOPPY DRIVE **£49.09**
SX1 Compatible

SX-1 SUPER BUNDLE

* SX-1 Expansion Module
*Black Keyboard
*Zappo Floppy Drive

£264.99



ROMBO

MEGAMIX. Low cost, hi spec digital effects cartridge plugs into the printer port of the Amiga. Allows stereo sampling from almost any musical source. **PRICE £29.49**

TAKE TWO. Animation package is a must for computer artists and enthusiasts of all ages. As used in Rolf Harris Cartoon Club. **PRICE £37.49**

VIDI AMIGA 12. The ultimate low cost colour digitiser for the Amiga. "the best value full colour digitiser on the market".- Amiga Format.**PRICE £72.49**

ROMBO VIDI AMIGA 12 (RT)
Based on the best selling Vidi Amiga 12. This all new version offers real time colour capture from any video source. Full AGA chipset support as standard for all A1200/A4000.**PRICE £132.49**

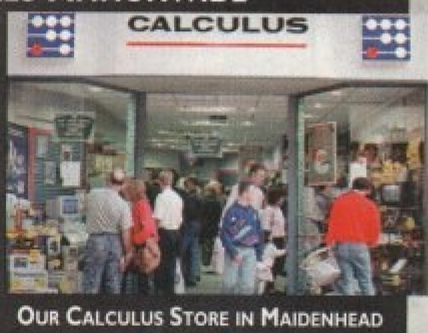
ROMBO VIDI AMIGA 24 (RT) Plus FREE Power Supply
For the more serious user, this 24 - bit version will again capture from any video source with true photo realistic images! A staggering 16.8 million colours can be utilised with incredible results. Full AGA chipset support. **PRICE £222.49**

CALCULUS STORES NATIONWIDE

SOUTH
AYLESBURY 39 Friars Square Centre TEL: 01296 436811
MAIDENHEAD 6 Nicholson Walk TEL: 01628 770768
HEMEL HEMPSTEAD Marlowes Centre TEL: 01442 250035
FARNBOROUGH 1 Princes Mead Shopping Centre TEL 01252 377722

MIDLANDS
BURTON-UPON-TRENT The Octagon Centre, New Street TEL: 01283 517505
COVENTRY 24 Orchard Walk Shopping Centre TEL 01203 520778
SUTTON COLDFIELD 80 The Parade TEL: 0121 3554839
TAMWORTH 34 Ankerside Shopping Centre TEL: 01827 67776
WALSALL 48 Park Mall Saddler Centre TEL: 01922 21700

NORTH
ALTRINCHAM 59 George Street. TEL: 0161 929 7433
DONCASTER 11 South Mall Frenchgate Centre TEL 01302 349997
LEEDS 11 Bond Street Centre TEL: 0113 2454098
NORTHWICH 85 Witton Street TEL: 01606 47883
HULL 11 Princes Quay TEL: 01482585100
OLDHAM The Spindles TEL: 0161 6270822



OUR CALCULUS STORE IN MAIDENHEAD

PRESTON St George's Centre TEL: 01772 259494
SHEFFIELD 67 The Moor Sheffield TEL: 0114 2721192
WARRINGTON 52 The Mall Golden Square TEL: 01925 575055
WIGAN 18a The Galleries Shopping Centre TEL: 01942 323913

SCOOP PURCHASE

Top Quality 100% Error Free

BULK DISKS

50 Disk Pack £15.49 Disk Labels 500 Pack £7.49

INDI DIRECT MAIL recognises all Trade Marks and Copyrights All prices are correct at time of going to press. E & OE. Some Calculus Stores may not carry a full range of Indi products.. Phone to avoid disappointment.

MAIL ORDER SALES HOTLINE 01543 419999

Access SWITCH VISA

* Insured deliveries by securicor are delivered Free of Charge Monday to Friday. A surcharge of £10 is required on a Saturday.(Uk Mainland)

Contents

System

The essential guide to Amiga gaming

Game Reviews



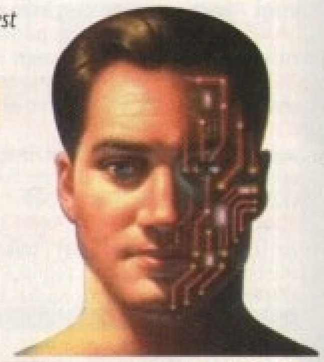

Flair Software pull out of the hat a different kind of platformer – page 115

Reviews





Features



Next issue on sale 4 May

COVER STORY

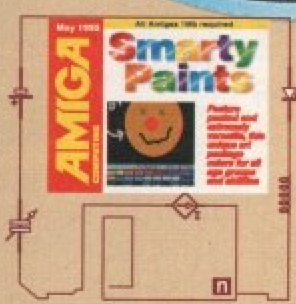


The Coverdisks

Page 20

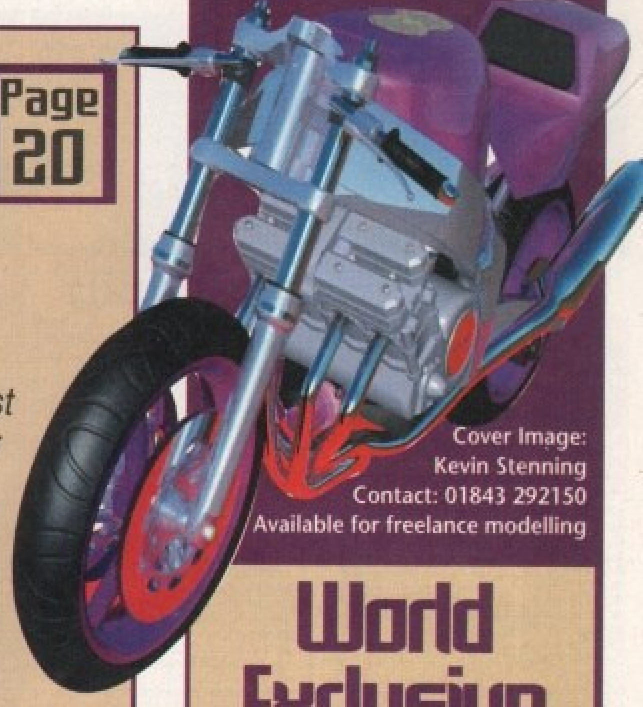
Multimedia Toolkit CD

Well and truly stuffed. That's just one of the descriptions about our amazing CD give-away which features 547 Mb of files for you to use with your Amiga.



SmartyPaints

A versatile and feature-packed art program for all ages which can also be easily configured for use as an edutainment tool for infants



Cover Image:
Kevin Stenning
Contact: 01843 292150
Available for freelance modelling

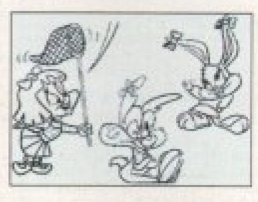
World Exclusive

The first look at NewTek's latest version of Lightwave. No other Amiga magazine gives you the best, first

See page 30

Regulars





AMIGA GUIDE



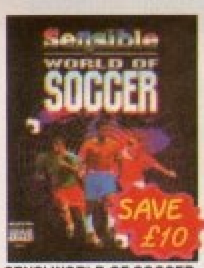


Subscriptions



Turn to page 76...

...for details of *Amiga Computing's* subscription offers this month



SENSI WORLD OF SOCCER
19.99



MONKEY ISLAND 2
12.99



THEME PARK
21.49 OR **22.99** A1200



SUB WAR 2050
24.99 A1200



COMBAT CLASSICS 3
23.99



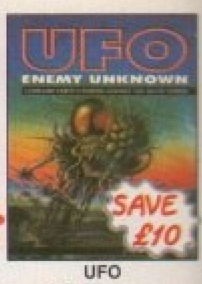
BEAU JOLLY COMP
25.99



CLASSIC COLL. - DELPHINE
20.49



ON THE BALL - LEAGUE
12.49 1 MB OR A1200



UFO
24.99 A1200



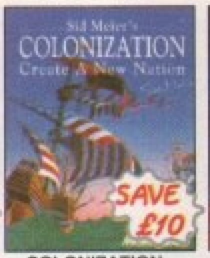
PINBALL ILLUSIONS
19.49 A1200



PREMIER MGR 3
16.99



TOWER ASSAULT
13.99



COLONIZATION
24.99 A1200



SHADOW FIGHTER
19.49 A1200



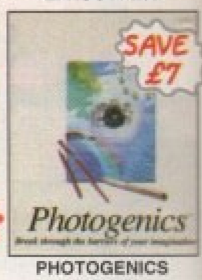
SUPER STARDUST
18.99 A1200



GUARDIAN
20.99 A1200



WING COMMANDER
5.99



PHOTOGENICS
47.99

PLEASE NOTE

- **NOP** = will not work on A500 Plus, A600 or A1200
- **NO12** = will not work on A1200
- **512K** = will work on 512k machines
- **•** = NEW Item

A1200 GAMES

AIR BUCKS V1.2 ..... 11.99
ALADDIN 19.99
ALFRED CHICKEN 17.99
ALIEN BREED 2 ..... 18.99
BANSHEE 18.99
BLITZ TENNIS • 18.99
BODY BLOWS 11.99
BODY BLOWS GALACTIC 18.99
BRUTAL FOOTBALL DELUXE 15.49
CHAOS ENGINE 18.49
CIVILISATION AGA 16.99
COLONIZATION • 24.99
DETROIT 21.49
DREAMWEB 23.99
DUNGEON MASTER 2 ..... 23.49
EXILE 19.49
FIELDS OF GLORY 23.99
FOOTBALL GLORY 19.49
GUARDIAN 20.99
HEIMDALL 2 - BANE OF ASGARD 21.99
IMPOSSIBLE MISSION 24.99
ISHAR 2 - LEGIONS OF CHAOS 18.99
JAMES POND 3 ..... 10.99
JAMES POND COLLECTION
- JAMES POND 2 & 3 ..... **11.99**
JUNGLE STRIKE 19.99
LION KING 19.99
MIGHTY MAX 18.99
NEW WORLD OF LEMMINGS • 20.99
COUPON - DEDUCT £3 UNTIL JUNE 30
ON THE BALL (HARD DRIVE ONLY)
- LEAGUE EDITION 12.49
- WORLD CUP EDITION 12.49
PGA EUROPEAN TOUR 19.99
PINBALL ILLUSIONS • 19.49
PREMIER MANAGER 3 ..... 16.99
ROAD KILL 20.99
SABRE TEAM 18.99
SHADOW FIGHTER • 19.49
SIM CITY 2000
HARD DRIVE/5MB RAM REQUIRED 23.99
SIM LIFE (1.5MB RAM REQUIRED) 12.49
SIMON THE SORCERER 23.99
SIMON THE SORCERER 2 ..... 23.99
SKELETON KREW 21.99
SOCCER KID 19.49
STAR TREK - 25TH ANNIVERSARY
(HARD DRIVE ONLY) 23.99
SUB WAR 2050 ..... 24.99
SUPER STARDUST 18.99
COUPON - DEDUCT £3 UNTIL JUNE 30
TFX 25.99
THEME PARK 22.99
TOP GEAR 2 (1 MB) 17.49
UFO - ENEMY UNKNOWN 24.99
WEMBLEY - INTERNATIONAL SOCCER 17.49

AMIGA GAMES

A-TRAIN + CONSTRUCTION SET 12.99
A.T.R. 18.49
A10 TANK KILLER 11.99
A320 AIRBUS • 20.99
AIR BUCKS V1.2 (512K) 11.99
AIR SUPPORT • 9.99
AKIRA • 20.99
ALIEN BREED (SPECIAL EDITION) 9.49
ALIEN BREED - TOWER ASSAULT (512K) 13.99
COUPON - DEDUCT £2 UNTIL JUNE 30
AMAZON QUEEN • 20.99
AMERICAN GLADIATORS (512K) (NO12) 13.99
APOCALYPSE 16.99
ARABIAN NIGHTS (512K) 9.49
ARCADE POOL 7.99
ARCHER MACLEAN'S POOL (512K) 11.99
AWARD WINNERS 3
CIVILISATION, ELITE 2, LEMMINGS **20.99**
AWARD WINNERS GOLD
SENSIBLE SOCCER, ELITE,
JIMMY WHITES SNOOKER, ZOOL **20.99**
B17 FLYING FORTRESS • 12.99
BATTLE FOR THE ASHES • 9.99
BEAU JOLLY COMP
CANNON FODDER, SETTLERS,
CHAOS ENGINE, T2 ..... **25.99**
BENEATH A STEEL SKY 22.99
BIG 100 (100 SHAREWARE GAMES) • 8.99
BIRDS OF PREY (NO12) 11.49
BLACK CRYPT 10.49
BODY BLOWS 6.99
BUBBA 'N' STIX (512K) 9.49
BUMP 'N' BURN (512K) 15.99
CAESAR DELUXE (512K) 11.99
CAMPAIGN 10.99
CANNON FODDER 12.99
CANNON FODDER 2 ..... 19.99
CAPTIVE 2 - LIBERATION • 8.99
CENTERFOLD SQUARES • 4.99
CHAMPIONS OF SPORT
CHAMPIONSHIP MANAGER 93, F1
(DOMARK), INTERNATIONAL RUGBY • **15.99**
CHAMP MANAGER (1995 EDITION) COLL • 18.99
CHAMP MANAGER 93/94 ..... 6.99
CHAMP MANAGER 93/94 ITALIA 14.99
CHAMP MANAGER 94/95
(END OF SEASON DATA DISK) 12.99
CHAMP MANAGER COLLECTION
(93/94 + UPDATE DISK) 14.99
CHAMPIONSHIP MANAGER ITALIA 95 • 20.99
CHAOS ENGINE (512K) 9.99
CHUCK ROCK • 8.99
CIVILISATION 24.49
CLASSIC COLLECTION - DELPHINE
FLASHBACK, CRUISE FOR A CORPSE,
ANOTHER WORLD, FUTURE WARS,
OPERATION STEALTH **20.49**
CLUB FOOTBALL - THE MANAGER 14.99
COLOSSUS CHESS X • 4.99
COMBAT CLASSICS 2
SILENT SERVICE 2, PACIFIC ISLAND,
F19 STEALTH FIGHTER **20.99**
COMBAT CLASSICS 3
HISTORYLINE, CAMPAIGN, GUNSHIP 2000 **23.99**
CORPORATION (512K) 8.99
CORRUPTION (512K) 4.49
CRICKET CAPTAIN (NOP) • 4.99
CRICKET MASTERS 18.99
CRUISE FOR A CORPSE (512K) 11.49
CURSE OF ENCHANTIA 11.99
DAILY DOUBLE HORSE RACING • 4.99
DAWN PATROL 23.49
DESERT STRIKE 10.99
DETROIT 21.49
DOGFIGHT 12.99
DUNE 11.49
ELITE (512K) 4.99
ELITE 2 (FRONTIER) 14.99
EYE OF THE BEHOLDER 12.49
EYE OF THE BEHOLDER 2 ..... 12.49
F1 (DOMARK) 17.99
F117A STEALTH FIGHTER 2.0 ..... 12.99
FIELDS OF GLORY 22.99
FIFA INTERNATIONAL SOCCER 23.49
FOOTBALL DIRECTOR 2 • 4.99
FOOTBALL GLORY 17.99
FOOTBALL MASTERS 18.99
FORMULA 1 GRAND PRIX (512K) 13.49
FORMULA 1 MASTERS 18.99
FRONTIER - 1ST ENCOUNTERS • 19.99
GENESIA 20.49
GOAL (512K) 8.99
GRAHAM GOOCH - TEST MATCH SPECIAL 19.49
GRAHAM GOOCH DATA DISK 12.99
GUNSHIP 2000 ..... 14.99
HEART OF CHINA 12.99
HIRED GUNS 13.99
HISTORYLINE 1914-18 ..... 21.99
INDIANA JONES FATE OF ATLANTIS
ADVENTURE 24.49
INNOCENT 9.99
ISHAR 3 ..... 20.99
JIMMY WHITES SNOOKER (NO12) 11.49
JINXTER (M/SCROLLS) (512K) 4.49
JOHN MADDEN'S FOOTBALL (512K) 10.49
JUNGLE STRIKE 18.99
K240 (UTOPIA 2) 13.49
KINGS QUEST 5 ..... 14.49
KINGS QUEST 6 ..... 23.49
KNIGHTS OF THE SKY 12.49
LEGENDS OF VALOUR (NO12) 11.99
LEISURE SUIT LARRY 1 ..... 11.49
LEISURE SUIT LARRY 2 ..... 11.49
LEISURE SUIT LARRY 3 ..... 12.49
LEMMINGS 2 (512K) 9.99
LOMBARD RAC RALLY (512K) 6.99
LORDS OF THE REALM 21.49
LURE OF THE TEMPTRESS 11.49
MICRO MACHINES (512K) 12.99
MONOPOLY (512K) 15.99
MORTAL KOMBAT 13.49
MORTAL KOMBAT 2 ..... 20.99
MR BLOBBY (512K) 8.49
ON THE BALL - LEAGUE EDITION 12.49
ON THE BALL - WORLD CUP EDITION 12.49
OVERDRIVE 6.99
OVERLORD 20.99
PGA EUROPEAN TOUR 18.99
PGA TOUR GOLF (512K) 11.49
PINBALL DOUBLE PACK
PINBALL DREAMS & FANTASIES **17.49**
PINBALL FANTASIES (512K) 12.99
PIZZA TYCOON • 22.99
POLICE QUEST 3 ..... 12.99
POPULOUS &
PROMISED LANDS (512K) (NO12) 10.49
POWERDRIVE 20.99
POWERMONGER + WW1 DATA DISK (512K) 11.49
PREMIER MANAGER 2 ..... 9.99
PREMIER MANAGER 3 ..... 16.99
PREMIER MANAGER 3 EDITOR • 12.99
PRINCE OF PERSIA 6.99
PROJECT X (SPECIAL EDITION) 10.49
RAILROAD TYCOON (NOP) 11.99
REACH FOR THE SKIES (512K) 11.99
REALMS 10.49
RED BARON 11.99
RISE OF THE ROBOTS 27.49
ROAD RASH (512K) 10.49
RORKE'S DRIFT (512K) 7.99
RUFF AND TUMBLE 18.49
RUGBY COACH • 4.99
RUGBY LEAGUE COACH 19.49
SCRABBLE (512K) 16.49
SECRET OF MONKEY ISLAND 12.99
SECRET OF MONKEY ISLAND 2 ..... 12.99
SENSIBLE GOLF 20.49
SENSIBLE WORLD OF SOCCER 19.99
SETTLERS 21.99
SILENT SERVICE 2 (NO12) 11.99
SIM CLASSICS 3 IN 1
SIM CITY CLASSIC, SIM LIFE, SIM ANT
(1.5MB RAM REQUIRED) **23.99**
SIMON THE SORCERER 21.99
SIMON THE SORCERER 2 ..... 21.99
SKID MARKS 14.99
SOCCER KID (512K) 9.99
SPACE LEGENDS
WING COMMANDER, ELITE,
MEGATRAVELLER **11.99**
SPACE QUEST 4 ..... 12.99
SPEEDBALL 1 & 2 (512K) 8.99
SPORTS MASTERS
PGA GOLF, INDY 500, ADV. TENNIS,
EUROPEAN CHAMPIONSHIP'S 1992 ..... **13.99**
STABLE MASTERS 18.99
STEVE DAVIS WORLD SNOOKER • 4.99
STREETFIGHTER 2 (512K) 11.49
STRIKER MANAGER • 4.99
SUPER SKIDS
SKIDMARKS + EXTRA CARS & TRACKS **20.99**
SUPER STREETFIGHTER 2 • 20.99
SWIV (512K) (NOP) 2.99
SYNDICATE 23.99
TACTICAL MANAGER - ENGLISH LEAGUE 18.49
TETRIS - 7 COLOURS (512K) 16.99
THE GREATEST
JIMMY WHITES, DUNE,
LURE OF THE TEMPTRESS **14.49**
THEME PARK 21.49
TORNADO 12.99
UFO - ENEMY UNKNOWN • 22.99
ULTIMA 5 (512K) (NO12) 5.99
UNIVERSE 22.49
VALHALLA 19.49
VALHALLA 2 - BEFORE THE WAR 23.99
WALKER (512K) 7.99
WEMBLEY - RUGBY LEAGUE 17.49
WHEN TWO WORLDS WAR 21.49
WING COMMANDER 1 ..... 5.99
WORLD CUP YEAR 94
GOAL, CHAMP MANAGER 94 + DATA DISK,
STRIKER, SENSIBLE SOCCER **14.49**
WORLD OF FOOTBALL • 20.99
WORMS • 17.99
ZEEWOLF 20.99
COUPON - DEDUCT £3 UNTIL JUNE 30
ZOOL 2 ..... 9.99

AMIGA CD32

17 BIT COLLECTION 2 CD'S.
MASSIVE 2 CD SET OF GAMES, DEMOS,
EDUCATION, MUSIC AND GRAPHICS • **31.99**
17 BIT CONTINUATION.
HUGE FOLLOW UP COLLECTION TO
17 BIT COLLECTION • **19.99**
A.T.R. (TEAM 17) 20.99
AKIRA • 23.99
ALIEN BREED - TOWER ASSAULT 19.99
COUPON - DEDUCT £3 UNTIL JUNE 30
ARCADE POOL 11.99
BANSHEE 18.99
BATTLECHESS 19.99
BENEATH A STEEL SKY 21.99
BENEFACTOR • 19.99
CANNON FODDER 21.99
CAPTIVE 2 - LIBERATION 22.99
CD EXCHANGE VOL 1.
EXTENSIVE COMPILATION OF
SHAREWARE AND PUBLIC DOMAIN
SOFTWARE. CONTAINS OVER 300 MUSIC
MODULES, PICTURES, ANIMATIONS AND
GAMES **14.99**
CDPD VOLUME 1.
FRED FISH DISKS 1-660 AND LOTS OF
PD/SHAREWARE • **19.99**
CDPD VOLUME 2.
FRED FISH DISKS 661-760 PLUS SCOPE
DISKS 1-220, AB20 ARCHIVES AND LOTS
MORE PD/SHAREWARE • **19.99**
CDPD VOLUME 3.
FRED FISH DISKS 761-890 AND LOTS OF
GRAPHICS, VISTA PRO DEM LANDSCAPES
AND CLASSICAL BOOKS TEXT • **19.99**
CDPD VOLUME 4.
FRED FISH DISKS 891-1000, OVER 700
FONTS, RAYTRACING UTILITIES,
APPLICATIONS AND C COMPILER • **18.99**
CHAOS ENGINE 12.99
D/GENERATION 12.99
DRAGONSTONE 18.99
ELITE 2 (FRONTIER) 14.99
EXTRACTORS • 19.49
FIELDS OF GLORY 22.99
FIRE AND ICE 12.99
FLINK • 19.99
FRONTIER - 1ST ENCOUNTERS • 19.99
GUARDIAN 19.99
HEIMDALL 2 - BANE OF ASGARD 21.99
JAMES POND 3 10.99
JUNGLE STRIKE 20.99
LEMMINGS 8.99
LITIL DIVIL 18.99
LOTUS TRILOGY (LOTUS 1, 2, 3) **18.99**
MAN UTD PREMIER LEAGUE CHAMPS 19.99
MICROFRENCH CD (8 TO ADULT).
THE FIRST EVER LANGUAGE COURSE
FOR THE CD-32. FEATURES REAL
SPEECH. COMPLETE WITH GCSE
PHRASE BOOK **26.99**
NICK FALDO'S GOLF 23.99
NOW ... GAMES 1.
100 PD/SHAREWARE GAMES • **19.99**
NOW ... GAMES 2.
100 PD/SHAREWARE GAMES • **18.99**
OSCARS & DIGGERS • 6.99
PINBALL FANTASIES 19.99
PINBALL ILLUSIONS • 19.49
PIRATES GOLD 14.49
RISE OF THE ROBOTS 22.99
ROAD KILL 20.99
SENSIBLE SOCCER - INTN'L EDITION 12.99
SHADOW FIGHTER • 21.99
SIMON THE SORCERER 23.99
SKELETON KREW 21.99
SOCCER KID 19.99
SPEEDBALL 2 ..... 13.49
STRIKER 13.99
SUB WAR 2050 ..... 21.99
SUPER FROG 11.99
SUPER STARDUST 18.99
COUPON - DEDUCT £3 UNTIL JUNE 30
THEME PARK • 23.99
TOP GEAR 2 ..... 19.49
TRIVIAL PURSUIT 10.99
UFO - ENEMY UNKNOWN 21.99
ULTIMATE BODY BLOWS
BODY BLOWS & BODY BLOWS GALACTIC **19.49**
WORLD CUP GOLF 20.99
WORMS • 19.99
ZOOL 11.49

A1200 APPLICATIONS

BRILLIANCE V.2 AGA.
PREMIER PROFESSIONAL ART
PACKAGE. (HARD DRIVE REQUIRED) **48.99**
PC TASK V.3.
SOFTWARE PC EMULATION SYSTEM
FOR AMIGA A1200. WINDOWS
COMPATIBLE WHEN USED WITH A4000.
REQUIRES DOS 3.3 OR ABOVE. (2 MB,
INSTALLABLE) • **59.99**

PHOTOGENICS
PHOTOGENICS IMAGE PROCESSING
PROGRAM FOR AMIGA. THE ULTIMATE
GRAPHICS AND MANIPULATION PROGRAM
WITH MULTIPLE FORMAT SUPPORT
(INCLUDES IFF, GIF, JPEG AND MANY
MORE) AND MANY EDITING FEATURES.
RATED 95% BY AMIGA FORMAT **47.99**

VISTA PRO (LITE)
FOR A1200/A4000. CREATE
AND ANIMATE SPECTACULAR VIRTUAL
WORLDS (HARD DRIVE REQUIRED) **26.99**
WORDWORTH V.2 AGA
WORD PUBLISHER (1 MB, EXTERNAL
DISK OR HARD DRIVE REQUIRED) **32.99**
WORDWORTH V.3.1 AGA
WORD PUBLISHER. PREMIER TOP
QUALITY WORD PUBLISHER PACKAGE.
(2 MB, EXTERNAL DISK OR HARD DRIVE
REQUIRED) **57.99**

AMIGA APPLICATIONS

AMOS - EASY.
EASY TO USE VERSION OF AMOS WITH
FULL TUTORIAL. (1 MB, INSTALLABLE) **23.99**
AMOS - COMPILER PROFESSIONAL.
COMPILES AND SPEEDS UP PROGRAMS
WRITTEN IN AMOS, EASY AMOS OR AMOS
PRO. (1 MB, INSTALLABLE) **25.99**
DATASTORE DATABASE SYSTEM.
SIMPLE TO USE, FULLY FEATURED,
THOROUGH DATABASE SYSTEM
(1 MB, INSTALLABLE) **44.99**
DELUXE PAINT 3.
VERY POWERFUL ART AND ANIMATION
PACKAGE WITH EXTENSIVE FEATURES.
(1 MB, INSTALLABLE) **9.99**
DELUXE PAINT 4.
EXTENSIVELY FEATURED. DESIGN,
PAINT AND ANIMATE IN UP TO 4096
COLOURS (1 MB, INSTALLABLE) **45.99**
DELUXE PAINT 5.
PREMIER ART, DESIGN AND ANIMATION
PACKAGE FEATURING FULL 24 BIT TRUE
COLOUR RGB EDITING. (2 MB,
INSTALLABLE, WORKBENCH 2.04+) **57.99**
COUPON - DEDUCT £5 UNTIL MAY 31
DISK EXPANDER.
A FLEXIBLE AND EASY TO USE DISK
DOUBLING SYSTEM. ALLOWS BOTH
FLOPPY AND HARD DRIVE USERS TO
INCREASE THEIR STORAGE CAPACITY
DRAMATICALLY. (1 MB, INSTALLABLE) **34.99**
FINAL WRITER (RELEASE 3).
COMPREHENSIVE WORD PUBLISHING
SYSTEM (2 MB MINIMUM, HARD DRIVE
REQUIRED) **69.99**
HANNA BARBERA ANIMATION WORKSHOP.
EXCELLENT ANIMATION PACKAGE
CAPABLE OF CREATING CARTOONS
AND QUALITY ANIMATIONS **29.99**
HOME ACCOUNTS 2.
PERSONAL FINANCE MANAGER **25.99**
HOME ACCOUNTS.
THE ORIGINAL VERSION OF THIS
BEST SELLING MONEY MANAGING
APPLICATION. (INSTALLABLE) **4.99**
KINDWORDS 3.
FULLY FEATURED VALUE FOR MONEY
WORD PUBLISHER. (INSTALLABLE) **25.99**
MINI OFFICE.
INTEGRATED WORD PROCESSOR,
SPREADSHEET, DATABASE AND DISK
UTILITIES. (1 MB, INSTALLABLE) **36.99**
MONEY MATTERS
1 MB, INSTALLABLE **36.99**
PEN PAL.
EASY TO USE WORD PROCESSOR
WITH MANY FUNCTIONS. (INSTALLABLE) **29.99**

LYNX 2 HANDHELD



29.99
WITH BATMAN RETURNS

POWERFUL 16BIT HANDHELD AT AN UNBEATABLE PRICE.

MAINS ADAPTOR 11.99
FOR LYNX 1 OR 2 (RECOMMENDED AS BATTERY LIFE IS SHORT)

COMLYNX CABLE 6.99
CONNECTS TWO CONSOLES FOR MULTIPLAYER ACTION

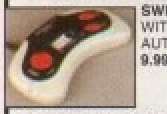
LYNX SOFTWARE

APB • 14.99
BASKETBRAWL 8.99
BILL AND TEDS EXCELLENT ADV. 8.99
CALIFORNIA GAMES • 14.99
CASINO 12.99
CHECKERED FLAG • 10.99
CHIP'S CHALLENGE 8.99
CRYSTAL MINES 2 ..... 8.99
DESERT STRIKE • 24.99
DINO OLYMPICS 12.99
DIRTY LARRY - RENEGADE COP 14.99
DOUBLE DRAGON • 19.99
ELECTRO COP • 14.99
GATES OF ZENDECON • 14.99
HOCKEY 11.99
HYDRA • 9.99
ISHIDO 8.99
KUNG FOOD • 14.99
LEMMINGS 24.99
MS PACMAN • 14.99
NFL FOOTBALL • 14.99
NINJA GAIDEN • 14.99
PAPERBOY • 14.99
PINBALL JAM 11.99
PITFIGHTER • 24.99
QIX • 8.99
RAMPAGE 11.99
RAMPARTS • 24.99
ROBOTRON 2084 • 12.99
S.T.U.N. RUNNER • 9.99
SCRAPYARD DOG 9.99
SHADOW OF THE BEAST 8.99
SHANGHAI 11.99
SLIMEWORLD 11.99
STEEL TALONS 9.99
SUPERSQUEEK • 14.99
SWITCHBLADE 2 ..... 11.99
TOKI • 24.99
TOURNAMENT CYBERBALL 14.99
TURBO SUB 8.99
VIKING CHILD 14.99
WARBIRDS • 14.99
WORLD CLASS SOCCER 11.99
XENOPHOBE 11.99
XYBOTS • 9.99
ZARLOR MERCENARY 11.99

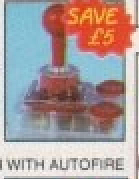
AMIGA BOOKS

A-TRAIN OFFICIAL STRATEGY GUIDE 16.99
AMIGA GAMES, HINTS, TIPS, CHEATS
AND ADVENTURE SOLUTIONS 9.99
AMIGA HARD DRIVES INSIDER GUIDE 12.99
AMOS IN ACTION 11.99
CANNON FODDER OFFICIAL GUIDE 11.99
CORISH'S COMPUTER GAMES GUIDE 12.99
EYE OF THE BEHOLDER HINT BOOK 9.99
EYE OF THE BEHOLDER 2 HINT BOOK 9.99
INDIANA JONES AND FATE OF ATLANTIS
HINT GUIDE. SPECIAL RESERVE CLUB
VERSION 3.99
KIDS AND COMPUTERS PARENTS
HANDBOOK 12.99
MASTERING AMIGA C 15.99
MASTERING AMIGA PRINTERS 13.99
PARENTS GUIDE TO VIDEO GAMES 9.99
SECRET OF MONKEY ISLAND HINT BOOK 9.99
SECRET OF MONKEY ISLAND 2 HINT BOOK 9.99
SECRETS OF FRONTIER (ELITE 2) 9.99
WING COMMANDER 1 AND 2 GUIDE BOOK 14.99

JOYSTICKS & MICE



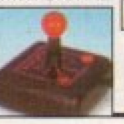
SWIFT TP200 JOYPAD WITHTURBO FIRE & AUTOFIRE
9.99



COMPETITION PRO EXTRA CLEAR BASE, MICROSWITCHED WITH AUTOFIRE
11.99



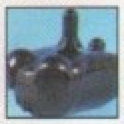
QUICKSHOT 137F PYTHON WITH AUTOFIRE
9.99



SLIK STICK JOYSTICK
6.99



FREEWHEEL STEERING WHEEL (DIGITAL) SUITS MOST DRIVING GAMES
12.99



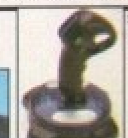
CHEETAH BUG MICROSWITCHED WITH AUTOFIRE
13.99



SCORPION PLUS ARCADE STYLE WITH TURBO FIRE
10.99



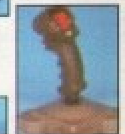
KONIX SPEEDKING ANALOGUE ENABLES PROPORTIONAL CONTROL ON SUITABLE SOFTWARE. AUTOFIRE
14.99



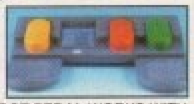
SAITEK MEGAGRIP 2 WITH AUTOFIRE
11.99



KONIX SPEEDKING JOYSTICK WITH AUTOFIRE
11.99



QUICKJOY JET FIGHTER MICROSWITCHED AUTOFIRE
12.99



QUICKJOY FOOT PEDAL WORKS WITH JOYSTICK
12.99



ALFA MEGAMOUSE 400. 400 DPI, HIGH QUALITY MOUSE
13.49



EKLIPSE MOUSE, MICROSWITCHED 290 DPI
10.99



ALFA OPTICAL MOUSE 300DPI, NO MOVING PARTS, VERYSMOOTH
29.99



MOUSE MAT WITH SPONGE BACKING
4.99

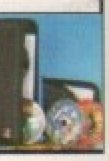


PACK OF 50 SPECIAL RESERVE 3.5" DSDD DISKS WITH LABELS ... **19.99**
PACK OF 10 SPECIAL RESERVE 3.5" DSDD DISKS WITH LABELS & FREE PLASTIC FLIP TOP DISK BOX **6.99**
PACK OF 10 TDK 3.5" DSDD DISKS WITH LABELS **7.99**
3.5" DISK HEAD CLEANER **5.99**

HIGH DENSITY DISKS ALSO AT KEENEST PRICES



DELUXE DISK BOX HOLDS 120 3.5" DISKS, WITH DIVIDERS
9.99



CD WALLETS WITH INDIVIDUAL PADDED POCKETS IDEAL FOR USE IN HOME OR CAR
48 CAPACITY...12.99
24 CAPACITY...9.99

GAMESMITH

The Game Development System

Are you tired of those "BASIC" game development systems? Ready for one that you can really sink your teeth into? Fast Parallax scrolling? No problem. Dual Playfields?? A piece of cake! Multiple viewports with multiple animated objects on independent paths with multiply defined background and object collision detection??? Child's play!



Creating fast parallax scrolling landscapes is easy with the Gamesmith system

Professional game development is made easy with the new GameSmith Development System. Over 3 years in the making, GDS gives you the low level power to create the masterpiece of your dreams in a single, comprehensive, easy to use development system.

Build up your animations graphically in the interactive character animator CITAS and then output in C or Assembler source code.

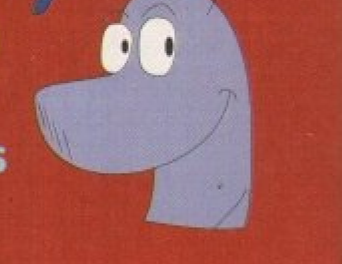
- Customise all aspects of the object, including sequence, placement, speed, display method, priority, & object collision detection parameters.
- Save complex animation sequences out as a single object addressable by the system!
- Optional custom encryption to protect your work.
- Fully supports AGA chipset and mode promotion.
- Hardware level smooth scrolling on a per viewport basis. Fast Parallax scrolling! Independently scroll in dual playfield mode.
- Custom copper lists. Custom hardware sprites.
- Over 350 pages of documentation fully describing the system, utility programs, and over 130 library functions.
- Detailed manual tutorial walks you through the creation of an actual game that exercises all the major components of the system!
- Extra disks full of commented example source code.
- Complete animation system with transparent double buffering and prioritised object display.
- Define custom object-to-object and object-to-background collision detection and response.
- Automatic placement and animation of multi-sequenced animated objects with a single call.
- Chain objects. Animating one object animates them all!
- Automatic virtual space and virtual object handling.
- Dynamic animation control. Modify on the fly!
- Complete audio system to make audio playback easy! Automatic load and play of IFF samples. Interrupt driven background sound replay.
- Easy-to-use, customisable joystick polling routines.
- Very fast and efficient ILBM picture loader.

The GameSmith Development System fully supports and is compatible with all Amigas including AGA. A C Compiler or 680x0 Assembler is required. From shoot 'em ups to graphic adventures, from intergalactic conquest to strategic simulation, the GameSmith Development System is the perfect solution.

Gamesmith now comes complete with Devpac Lite and a reduced version of Dice C so you can start programming straight out of the box.

Don't let the limitations of yesterday keep you from forging the masterpiece of tomorrow!

Termite

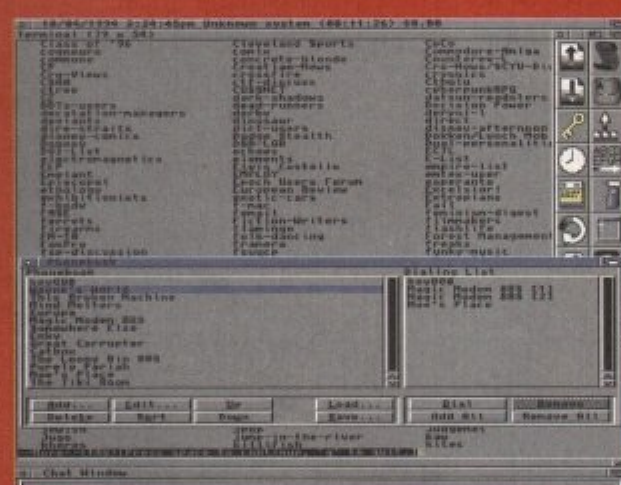


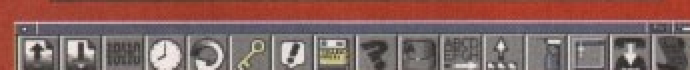
Telecommunications for your Amiga

Afraid of becoming a hedgehog on the Information Super Highway? Don't worry! Termite is so easy to use that even a first time telecommunicator will feel at home. Yet it has all of the power and flexibility to satisfy the most seasoned modem warrior!

Termite is designed to take full advantage of all of the newest features of Workbench 2™ and beyond. It is 100% Amiga Style Guide compliant and provides you with all of the modern user interface features to really enjoy playing in the highway!

- Speeds from 300 to 115,200 bps.
- Flexible phone book with unique configurations for each number.
- Supports Amiga standard XPR libraries allowing you to choose from a wide variety of transfer protocols such as Xmodem, Ymodem, Zmodem, Kermit, and more.
- Supports Amiga standard XEM external terminal emulations in addition to the built in ANSI and VT-102 terminal emulations.
- Configurable review buffer with cut and paste editing between any window.
- The unique script recording function watches your actions and writes complex scripts for you!
- Flexibility! Termite is so completely configurable that everyone can make it their own dream terminal program!
- User configurable floating Button Bar! Assign any program function, macro, or ARexx script to any button. Want your own icons? Just assign any IFF image to the button!
- Automatic call logging. Where you were, for how long, and how much you spent, all saved for you.
- Configurable text macros.
- Support for multiple line BBSs.
- Fully ARexx programmable for complete automation. Assign your scripts to the button bar or install them as a menu option.
- Multi-tasking chat window. Great for those real time conferences.
- Completely font and screen sensitive. You choose the font and screen mode and Termite automatically adjusts everything.





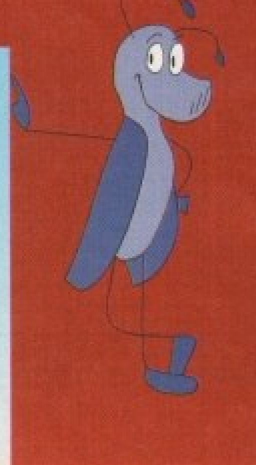
the Termite Button Bar

Termite comes complete with a comprehensive manual explaining the operation of every program function including a quickstart tutorial, ARexx programming examples and a telecommunications glossary. We have also set up the button bar with useful, instant access to CIX and other popular BBSs.

Termite (RRP £39.95 inc) and Gamesmith (RRP £99.95 inc) should be available now from all good Amiga stores. In case of difficulty you can order directly from HiSoft...

HiSoft
High Quality Software

The Old School, Greenfield,
Bedford MK45 5DE UK
Tel: +44 (0) 1525 718181
Fax: +44 (0) 1525 713716



NEWS

By ADAM PHILLIPS

Mail order company raided by fraud squad

Punters left licking their wounds after dealing with the now notorious Luton-based WTS Electronics mail order company can take comfort in the raid carried out on the firm by the Bedfordshire fraud squad on 1 March. While the main target was WTS, Total Computer Supplies, based in Hemel Hempstead, were also raided because the police believe the two firms may be connected.

David Pleece, managing director of WTS and his co-director, Mark Barnby, were arrested and company documents seized after a staggering 800 complaints were made to various governing bodies such as the trading standards council and the Advertising Standards Authority.

Thirty Bedfordshire and Luton fraud squad officers, both plain clothes and uniformed, swooped on the suspects at dawn. Also arrested were Sean Saint, company secretary of Total Computers, and the director, Patricia Dykes. DC Ron Lack, one of the key players in the operation, told *Amiga Computing* that the four individuals have been released on bail as he and his team continue their lengthy breakdown of the thousands of documents the case has thrown up. The department has been snowed under with phone calls from angry customers of WTS and he expects this to continue.

"People who ordered at Christmas usually phone a company up afterwards if they don't receive their goods. They're fobbed off with some excuse and then told they'll receive it in a month's time. This doesn't happen and come mid-March, beginning of April, people start to take serious action such as hiring a solicitor" commented Lack.

The bad news for punters eager for a speedy conclusion is that they'll have to be patient for the time being while police continue their extensive investigations.

WTS Electronics: Major police raid carried out after 800 complaints received

Dark horse

When the German company Escom appeared for the first time last year, not many people outside of its home country had heard of them. With over 200 retail stores in Germany and central Europe, the firm has only recently bought retail outlets in England. To give an idea of the size and success of the company, Escom is the second largest computer manufacturer in Germany and recently, two new shareholders have come on board, each allegedly worth 80 billion and 15 billion German marks respectively, both having major plans to move into interactive media and cable television.

With this kind of clout and an ex-Commodore chief in its management, Escom are hopefully in a position to offer Amiga users a bright future if their buyout is successful.

The next generation of Amigas?

Interesting news has surfaced about an Amiga-compatible graphics and video workstation called the DraCo from German company Macrosystem GmbH. The makers have side-stepped the Amiga custom chips by replacing them with powerful software and hardware combinations.

Macrosystem believe that any software compatible with the Amiga will work on the DraCo such as Lightwave, ImageFX and AdPro. Also, hardware that doesn't rely on the Amiga custom chipset should work fine.

The first machine using this technology is planned to be unveiled at the NAB show in Las Vegas on the 9 April, with the product going on sale in early summer. It'll come in a full-size tower with a minimum of 4Mb expandable to 128Mb of on-board 72-pin SIMMs. A parallel port and triple speed CD-ROM drive will also be included. After this initial machine, a variety of different specced models are also being produced to suit particular user's needs.

Brush with disaster

The Commodore buyout has been at the centre of another shock with Escom, a German company that has over 200 chainstores spread throughout Europe, apparently having their bid accepted by the liquidator, Franklyn Wilson. This, as usual, means that the bidding process should get underway in the next four to six weeks.

The revelation came about after Escom bought a key Commodore trademark from the bankruptcy trustee Bernard Hembach of the now defunct German subsidiary. This sale went through on 16 February despite the US bankruptcy court trying to block the sale with a temporary restraining order.

Allegedly, Escom's original intention was to use the trademark to produce clone machines to fill the hungry Amiga market, and that they had no interest in the other facets of the defunct company.

The reaction in the Bahamas and America was one of fury as the liquidators there said that the German liquidator had no right to receive the $1.4 million paid for the trademark because it belongs to CEL, not simply the subsidiary. The US judge wanted to know why Hembrach shouldn't be held in civil contempt and a situation was created that could have derailed the whole proceedings for several weeks.

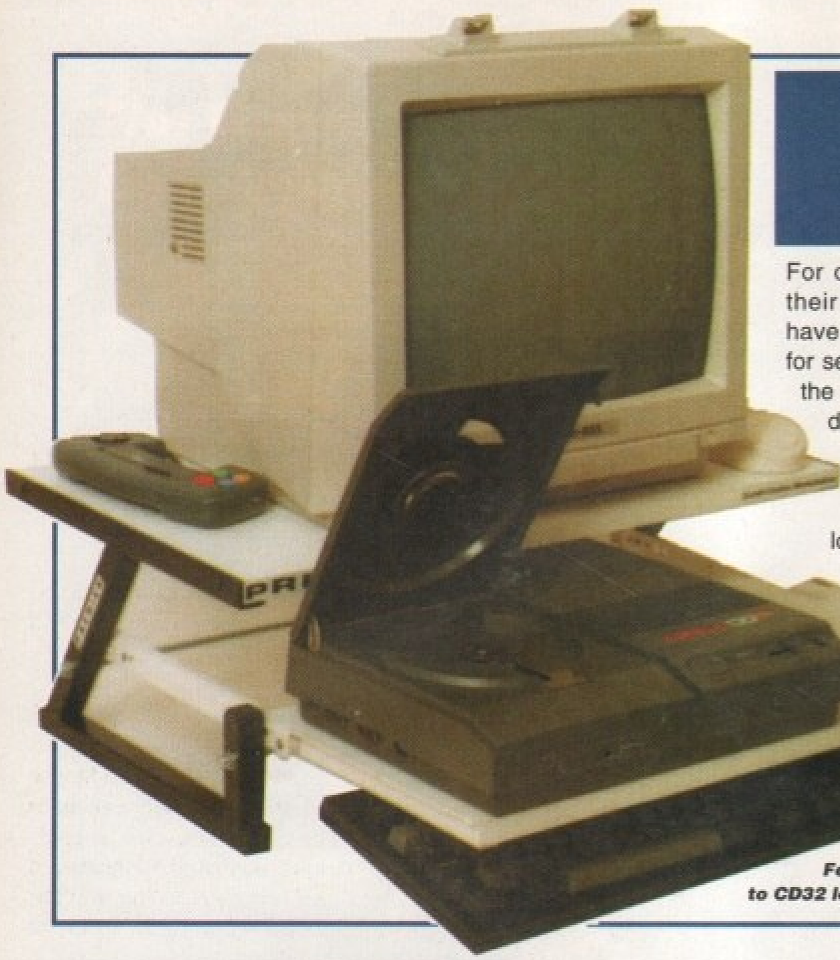
Hembach has argued that the American court has no jurisdiction in the matter, saying the logo was owned by the German subsidiary, not the parent company.

Allegedly, David Pleasance, managing director and head of the MBO at C=UK, threatened to pull out if Commodore's trademark was not included in the buy-out.

While Pleasance wants to rename the company, they, like Escom,are rumoured to have intentions for licensing Amiga technology to third-party developers, but without the trademark – this wouldn't be possible.

Fortunately, Escom have now backed down and agreed to buy the remnants of Commodore from the Bahamian liquidators, with the promise of handing over the trademark if their bid should be topped by one of their competitors.

At the moment the liquidators are in the process of arranging the day on which the bidding process will take place.



Taking your CD32 higher

For owners wanting to make the most out of their CD32 console, Premier Developments have released the Combi-Centre 'workstation' for serious multimedia users. Designed to allow the CD32, SX1 Expansion, monitor, keyboard, disk drive and other peripherals to sit on a special shelving unit, the workstation's unique feature is the sliding shelf which allows easy access to the CD32's loading bay.

Costing £49.99, phone John Germany on 01487 823684 for more details. or pay a visit to an Amiga specialist near you.

Combi-Centre workstation: Features a slide-out tray for access to CD32 loading bay

NEWS

Internet begins trading

The First Bank of Onternet, the FBOI for short, has announced the initiation of transaction processing services for the Internet electronic commerce. Purchases over the Internet can now be made without exposing personal credit card information.

Usually, Internet purchase procedures require personal credit card information that can be monitored by thousands of people all over the world. It has been known for users to attempt to either decode the credit card information or impersonate the customer in future transactions.

The new system uses the Automated Teller Machine card which has a cash limit prepaid by the customer. The FBOI say the system is safe because access to ATM funds without the possession of both the ATM card and the Personal Identification Number is not possible.

All transactions are handled by the bank itself with both customer and supplier going directly through it via the use of e-mail. The only downside is that the FBOI charges five per cent for every transaction, but if this system points the way towards a safer security on the information highway, perhaps it's a price worth paying.

Amiga under the spotlight

After the success of last year's show, Spotlight '95 returns again between the 10 and 11 of June at the Hammersmith Novotel hotel. The exhibition is aimed at the more serious end user who, while interested in games, wants to get more out their machine.

With the backing of our good selves at *Amiga Computing*, the show is also being sponsored by various manufacturers and distributors. The organisers, Gasteiner Technology, are predicting a fourfold increase in size, with a wide variety of companies attending. These include Commodore UK, Power Computing, HiSoft, First Computer Centre, Meridian Software and more.

For further information on booking, give Priscilla Bell a call on 0181-345 6000.

New wide bay printer

Seikosha, makers of watches and printers, have announced the arrival of their latest addition to the dot matrix range, the MP-5450. Featuring a 9-pin print head and a faclility for printing larger than usual sheets, the company claim that the printer is capable of 300 characters per second and can print in colour if required.

The price tag attached to the new model is a rather substantial £349. While prices will drop once in the shops, we haven't seen such an expensive recommended retail price for a low-end machine in quite some time. Let's hope it's something really special.

The company is also releasing the Speedjet 360 Colour at a more reasonable cost of £279. Featuring a colour print head with 51 nozzles and the ability to print both landscape and portrait orientation, more details can be obtained from Seikosha on 01753 685873.

A complete range of paper and film specifically designed to give a quality output from inkjet printers has been launched by Infotec Supplies. For anyone whose used one of the temperamental machines, they can be very picky about the paper they're printing onto.

Bleeding text and images, paper jams and an assortment of other niggling details can often make a print out look as if it just popped out of a 9-pin dot matrix machine. Bob Milford, head of Infotec's Supplies division commented: "Many inkjet printer users have experienced serious problems by using paper not designed for inkjet printers. We have designed the Imagejet range solely for the inkjet market, even down to specific papers for specific machines, to ensure that these problems are eliminated."

There a variety of paper types in the range to suit the needs and wallet of users, and a technical line has been set up to aid buyers in making the right choice for their particular printer. For more information, contact Infotec UK on 0181-207 2700.

CompuServe heads for the Internet

Taking a major step closer to offering its users the Internet via their services, CompuServe have acquired SPRY for approximately $100 million in the largest ever acquisition in the rapidly growing Internet industry. SPRY manufacture the number one selling Internet access product as 'Internet in a box.'

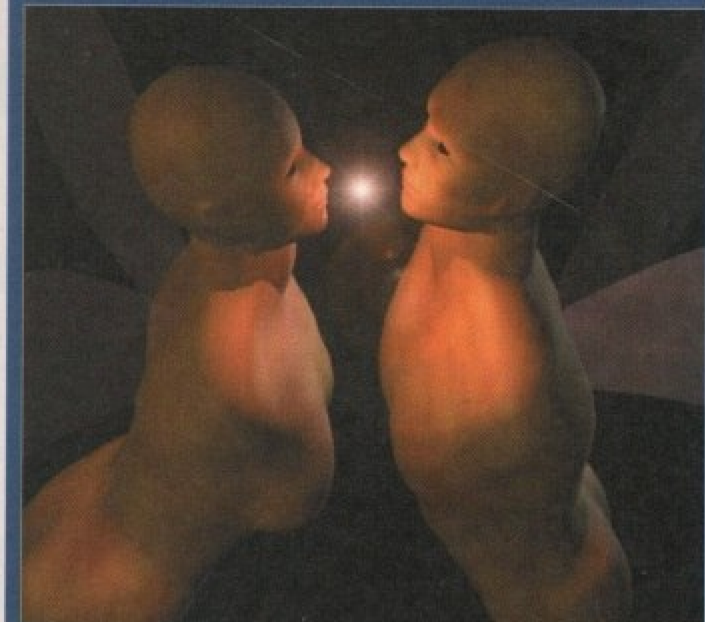
"This move is of tremendous importance to the industry and offers outstanding opportunities for CompuServe," said Maury Cox, CompuServe President and Chief Executive Officer. "It addresses three significant opportunities available to CompuServe: Internet access from the CompuServe Information Service; the creation of future services on the Internet; and the ability to assist our corporate network customers in accessing the Internet. This acquisition turns us into the premier one-stop shop for Net access and services."

The main benefit being touted for the end user is the Internet Made Easy feature of SPRY's one-button installation of their Internet Mosaic software. Internet access will be offered from 140 countries with more than 420 points of presence for local dial-up connection.

Art, darling, art

For those that have a little cash stored away for a rainy day and have an avid fascination with computer graphics, a trip to the Bit Movie '95 from the 13 to the 17 April could be of interest. Being held at Riccione in Italy, the festival covers art derived from the production of computer images, animations and musical compositions.

For more details, contact Carlo Mainardi on 39 541 643016.



Bit Movie '95: An example of the work being shown – True Love by Beny

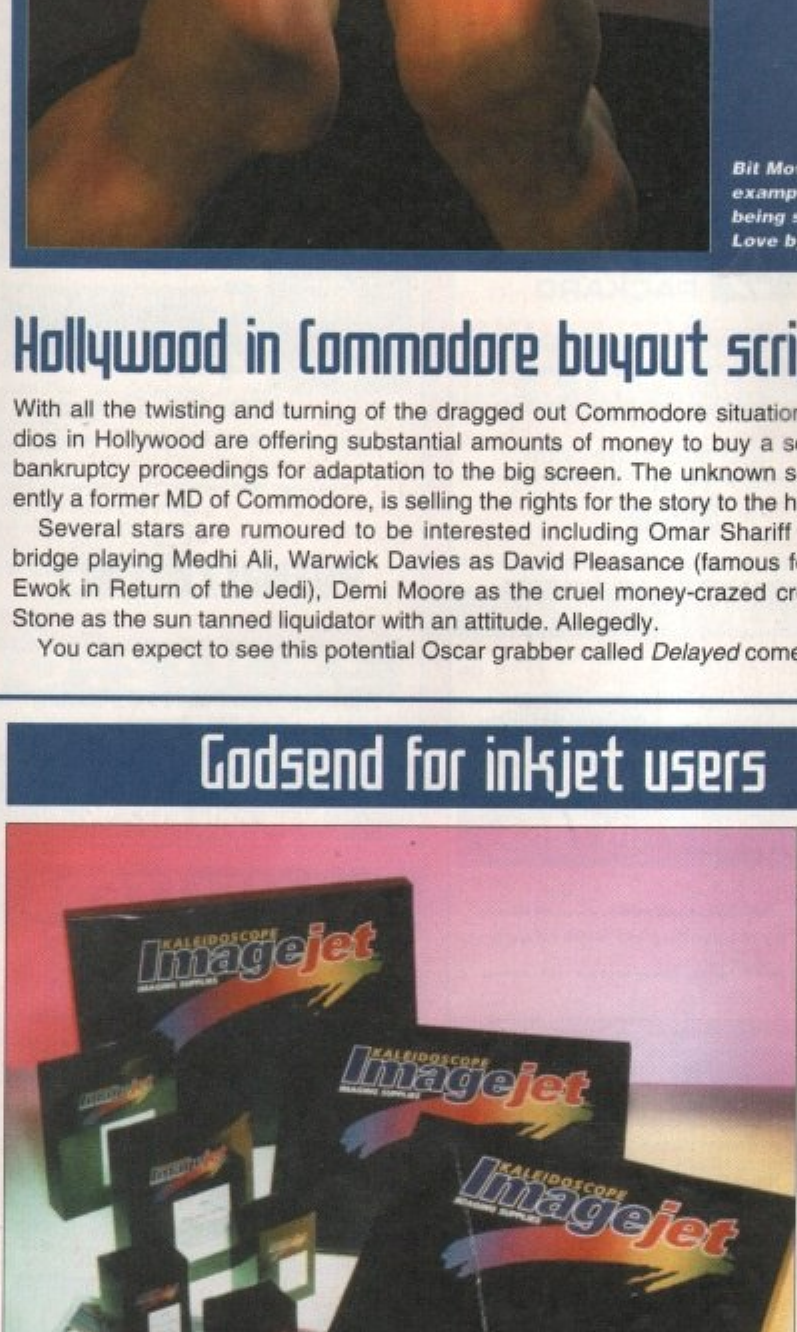
Hollywood in Commodore buyout script shock

With all the twisting and turning of the dragged out Commodore situation, three major studios in Hollywood are offering substantial amounts of money to buy a script based on the bankruptcy proceedings for adaptation to the big screen. The unknown script writer, apparently a former MD of Commodore, is selling the rights for the story to the highest bidder.

Several stars are rumoured to be interested including Omar Shariff as corporate and bridge playing Medhi Ali, Warwick Davies as David Pleasance (famous for his role as lead Ewok in Return of the Jedi), Demi Moore as the cruel money-crazed creditor and Sharon Stone as the sun tanned liquidator with an attitude. Allegedly.

You can expect to see this potential Oscar grabber called *Delayed* come January... 1999.

Godsend for inkjet users



Inkjet-specific paper: Bleeding text may well become a thing of the past

News briefs

Stop the press

Wired? Connected? Hooked? If you've recently plugged in to the Internet then your first port of call has to be Amiga Computing's new home page packed with reviews, previews and news.

Reach us by tapping in this URL web address:

http://www.demon.co.uk/amigacomp/

Enjoy and make sure to send us your opinions and views on what you see and what you would like to see. Cybersurfs up dudes and dudettes!

Motion magic

For non-linear editors, DTV users and 3D artists, the US-born Motion Clips is a CD-ROM containing over 8,000 frames of royalty free stock footage. Consisting of 20 image sequences that can be used as backgrounds, textures, or reflection maps, these anims can be imported to a wide selection of programs such as Lightwave, Wavemaker, ImageFX, Hollywood FX, AdPro and more. Look out for our review in next month's *Amiga Computing*.

Unstoppable print machines

Printers seem to be the only peripheral that, like modems, never go out of fashion, with a constant influx of new models pumping into the showrooms. Now, Intergex Systems have unveiled their ColourJet Master, a thermal inkjet-based printer at a reasonable price of £249.

Offering 300 by 300 dpi in colour and 600 by 300 dpi in colour, the printer has a built-in 150 sheet feeder and a duty cycle of up to 2000 pages a month.

Envoy sequel

After the success of Envoy, the peer-to-peer networking software, its makers, Intangible Assets Manufacturing, have released the sequel, Envoy 2. Its new features include support of Amiga 2.04 DOS packet types, support for removable media, enhanced reliability and robust recovery, localisation, AmigaGuide documentation and more. For users of the original Envoy, upgrades are available, and anyone interested can call Almathera, IAM's UK distributors, on 0181-687 0040.

Swelling popularity

After Lightwave Pro magazine comes the arrival of the latest addition to Lightwave extras, Into The Light. This monthly newsletter has tutorials, new product releases, tips, tricks and business advice for professional animators. Subscription charges are $25 for 12 issues and for more details, e-mail Jose Burgos on IntoLight@aol.com.

Aardman results

A few months ago, we featured those horrifically talented people at Aardman Animations in our humble pages. While there, we managed to scrounge three Wallace and Gromit T-shirts from Nick Park and co. and set a competition for you, the readers. The results are as follows: Jon Glendening, Brighton, Adrian Pang, London and Lucy Marr up in sunny Glasgow. Well done, and expect your prize any day soon.

PRIMA A500 & A600 RAM Trap Door Modules

A500 512k RAM (no clock)
£19.99
A500 Plus 1 Mb RAM
£34.99
A600 1 Mb RAM (with clock)
£39.99

MEMORY MODULES

1 Mb 72 pin SIMM	£39.99
2 Mb 72 pin SIMM	£95.99
4 Mb 72 pin SIMM	£145.99
8 Mb 72 pin SIMM	£269.99
16Mb 72 pin Simm	£409.99
1 Mb 30 pin SIMM	£24.99
4Mb 30 pin SIMM	£124.99
256X4 DRAM (DILs)	(each) £5.99
1X4 DRAMS(1Mb)	£39.99
256X 4 ZIPPS	(each) £5.99
1X4 ZIPPS(1/2 Mb)	£32.99

Part exchange available on your old memory call for best pricing.

CUSTOM CHIPS

Kickstart 1.3	£23.99
Kickstart 2.04	£30.99
Kickstart 2.05 (for use in A600)	£30.99
Fatter Agnes 8372A	£26.99
Super Denise	£18.99
6571-0326 Keyboard controller	£13.99
CIA 8520A I/O controller	£10.99
68882 Copro 25 PLCC	£34.99
68882 Copro 33 PLCC	£44.99
68882 Copro 40 PLCC	£79.99
68882 Copro 40 PGA	£89.99
68882 Copro 50 PGA	£99.99

LOW PRICES!

AMIGA 1200 RAM

PRIMA CO-PRO & RAM

Realise the full potential of your A1200 with this trapdoor expansion. inc real time clock

1 MB RAM	£90.99
2 MB RAM	£129.99
4 MB RAM	£194.99
8 MB RAM	£319.99
1 MB & 33 MHz CO PRO	£114.99
2 MB & 33 MHz CO PRO	£149.99
4 MB & 33 MHz CO PRO	£219.99
8 MB & 33 MHz CO PRO	£334.99

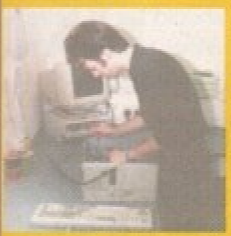
FULL 2 YEAR WARRANTY

JOYSTICKS

Competition Pro Xtra	£12.99
Competition Pro Super CD32 Control Pad	£15.99
Cruiser Black	£8.99
Cruiser Multicolour	£8.99
Cruiser Turbo	£10.99
Freewheel Analogue	£35.99
Gravis Game Pad	£18.99
Logic 3 Logipad	£16.99
Sureshot Clear	£7.99
Speedking Analogue	£11.99
Speedking Auto	£10.99
Speedking Navigator	£12.99
Topstar Auto	£19.99
Zipstick Super Pro	£10.99

AMIGA REPAIR CENTRE

We offer a FREE quotation on your Amiga or any peripheral (monitors, printers etc). A delivery tariff of just £5.00 is charged for return delivery or alternatively you can visit our showroom. We can also arrange a courier pickup at an additional cost of £11.00.



All work is carried out by our highly qualified engineers in custom built premises. We will also install any upgrade/ software or accessory .

All repairs are covered by a 90 day warranty.

Tel. 0113 2319444

The established name in computer repairs

NEW PRODUCTS

Prima SCSI enclosures

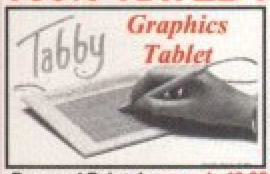
Suitable for external SCSI devices to be connected to suitable SCSI interface eg. Squirrel, GVP, Oktagon etc.

Single drive enclosure £69.99
Double drive enclosure £89.99
Quad drive enclosure £139.99

All enclosures have built in SCSI ID selector, low noise cooling fan and shielded heavy duty internal PSU. Enclosures can be daisy chained.

100% RATED !

AMIGA COMPUTING AUGUST 94



The amazing new graphics tablet for the Amiga developed with the help of First Computers. 86% rated in ST Format January issue! Requires 2.04 WB or above

Personal Paint 4 now only £9.99 when purchased with a Tabby!

only £59.99

SCANNERS

Alfa Data Alfa Scan only £119.99
hand held scanner with up to 800 Dpi
Alfa Data Alfa Scan 256 only £119.99
hand held scanner with up to 800 Dpi and 256 greyscales
Alfa Data Alfa Colour Scan only £329.99
18 bit scanner with 256K colours inc colour correction

Just add £20.00 for OCR software on all Alfa Scanners (normally £39.99)

Power Scanner V4 £119.99
With the latest version 4 s/w for bright & sharp grey scale performance. Flexible scanned image display manipulation options, plus Clean up, embolden, resize & flip.
Colour version only £249.99
EPSON GT6500 Colour Flatbed
NEW LOW PRICE!! £499.99
Phone for information pack.
Art Department Pro Scanner S/W only £99.99
compatible with Epson GT6500 & GT8000.

MICE & TRACKERBALLS

Alfa Data Mega Mouse
90% rating. 400 Dpi
only £13.99
Zydec Trackball only £29.99
Alfa Data Crystal Trackball only £34.99

DISK DRIVES



AMITEC 1 mb 3.5" drive
Features Anti Click, Anti Virus, Sony Mech, 2 year warranty
only £54.99

***NEW!* Power High Density drive**
2.04 or above **only £64.99**

Cumana 3.5" Ltd. offer **only £49.99**
1 meg external drive. The best name in disc drives

A600/1200 internal drive	£39.99
A500 internal drive	£39.99
A4000 internal HD drive	£99.99

GENLOCKS

VHS VHSC SVHS SVHSC Video8 Hi8

hama **ON DEMO NOW!**
The Professional answer
***hama* 292 £279.99**
S-Video, and composite compatible
***hama* 290 £679.99**
S-Video, and composite mixing, plus far more
***hama* A-CUT Video Editor £185.99**
Rocgen Plus only £164.99
Includes dual control for overlay and keyhole effects, extra RGB pass thru. Check for compatibility.
Rendale 8802 FMC only £164.99
New Rendale 9402only £299.99
features S-VHS, fade Amiga graphics in and out, cross fade between Amiga graphics and your video input
Rocgen Rockey only £164.99
For creating special effects in video production with genlocks.

MONITORS

All our monitors are UK spec. All monitors come complete with a free Amiga lead*

NEW! Philips 8833 MK2

This famous Stereo, colour monitor is back. Similar spec to the old Commodore 1084S.
only £239.99
Tilt and Swivell Stand only £9.99 if you purchase with monitor

Microvitec Autoscan 1438



.28 dpi, 15/38 KHz, all Amiga modes, AGA comp.no audio, tilt & swivell stand.
now only £295.99
*Free cable for A4000 only
A1200 cable £6.99 extra

AKF 52 Multisync

only £229.99
add £6.99 for adaptor if using with A1200

ACCELERATORS

VIPER-II 68030 Series

68030 accelerator running at 28Mhz expandible to 128 Mb 32 Bit RAM (see RAM prices) Optional SCSI adaptor.

Viper 28 EC	£114.99
Viper 28 MMU	£134.99
Viper 33 MMU	£179.99

Part exchange available on your old memory call for best pricing.

SUPRA 28 ACCELERATOR

for the A500/A500+& A1500/2000
28 Mhz, uses A500/A500+ side port
only £127.99!

PRIMA ROM SHARERS

This high quality ROM sharer features a flexible ribbon connection so that it can be positioned anywhere within your A500 Plus or A600. Full 2 year replacement warranty

now only £17.99 or £24.99
for keyboard switchable version

MISCELLANEOUS

Real Time A1200 internal clock module	only £13.99
Mouse/joystick automatic port switcher	only £9.99
Amiga A500/600/1200 Power Supply	£34.99
Amiga 500/500 Plus keyboard	£45.99
Amiga 500 Plus Motherboard	£29.99
Amiga 500 Plus Case	£12.99
QUALITY MOUSE MATS	£2.99
10 CAPACITY DISK BOX	£0.99
50 CAP LOCKABLE DISK BOX	£3.49
100 CAP LOCKABLE DISK BOX	£4.49
*90 CAP STACKABLE BANX BOX	£12.99
*150 CAP STACKABLE POSSO BOX	£20.99

*add £3.00 delivery if purchasing just one Posso or Banx box. Normal delivery when purchased with other product or when buying 2 or more.

AMIGA A500 DUST COVER	£2.99
AMIGA 600 DUST COVER	£2.99
AMIGA 1200 DUST COVER	£2.99
14" MONITOR DUSTCOVER	£5.99
NEW! Keyboard Membrane Covers	£14.95
AMIGA TO SCART CABLES.	£9.99
STD 1.8 METRE AMIGA PRINTER LEAD	£2.99
MODEM AND NULL MODEM CABLES	£9.99

AMIGA CONTROL STATIONS

A500 or 1200 VERSION	£36.99
A600 VERSION	£29.99

DISKS

All disks are 100% error free guaranteed
New High density 3.5 inch bulk and branded
Please phone for best prices!

QTY	Bulk DS/DD	Branded DS/DD
10	£4.49	£5.49
30	£12.99	£14.99
50	£20.99	£22.99
100	£37.99	£42.99
200	£69.99	£79.99
500	£168.99	£190.99
1000	£324.99	£365.99

Branded disks come complete with labels

Disk Labels	500	£6.99
Disk Labels	1000	£9.99

SOFTWARE

NEW

CD ROM SOFTWARE

17 Bit Collection	£33.49
17 Bit Continuation	£14.49
17 Bit Phase 4	£14.49
17 Bit/LSD compendium 1	£16.99
17 Bit/LSD compendium 2	£16.99
Adult Sensation	£16.99
Aminet 4 (Nov 94)	£14.49
Aminet 5	£14.49
Aminet collection (Box set 4 CD's)	£29.99
Amos Users CD	£16.99
Assassins CD	£16.99
CD-PD 1	£16.99
CD-PD 2	£16.99
CD-PD 3	£16.99
CD-PD 4	£16.99
Demo CD 1	£16.99
Demo CD 2	£16.99
DeskTop Video CD	£13.99
EuroScene 1	£12.49
Emerald Mines	£12.49
GIFs Galore	£14.10
GoldFish 1	£24.49
GoldFish 2	£24.49
Illusions CD	£8.99
Light ROM	£37.99
MultiMedia ToolKit	£16.99
Network CD	£12.49
Professional Fonts	£16.99
Sheer Delight	£16.99
Sounds Terrific	£16.99
Space & Astronomy	£16.99
Towns of Tunes	£16.99
Weird Science ClipArt	£8.99
Weird Science Fonts	£8.99
Weird Science Anims	£16.99
WPD Fonts	£12.49
WPD Hottest 4	£12.49
WPD Utils 1-1500	£12.49

NEW!PRIMA CD-ROM Volume1
510Mb of fonts, artwork, photo's, demos, utils, games
now only £16.99

MISCELLANEOUS

Distant Suns 5	£29.99

MUSIC/SOUND

Aura	£74.99
Deluxe Music Construction Set v2	£59.99
Pro Midi Interface by Microdeal	£24.99
Techno Sound Turbo	£20.99
Techno Sound Turbo II	£28.99

PUBLIC DOMAIN *Top 30* *from £1.50!*

National Lottery Predictor	(PDA040)	1 disk £1.50
First Fonts Disk 1	(PDAFO1)	1 disk £2.50
First Fonts Disk 2 or 3	(PDAFO2)	1 disk £2.50
First Fonts Disk 4	(PDAF05)	1 disk £1.50
D-Copy V3	(PDA004)	1 disk £1.50
Edword Pro V4	(PDA005)	1 disk £1.50
Relokick 1.3	(PDA011)	1 disk £1.50
Klondyke AGA	(PDA013)	3 disk £2.75
Mindwarp AGA Demo	(PDA015)	1 disk £1.50
Magic Workbench Utils	(PDA017)	1 disk £1.50
PC Task Emulator	(PDA019)	1 disk £1.50
Spectrum Emulator ver. 1.7.	(PDA028)	1 disk £1.50
Spectrum Games Disk	(PDA030)	2 disk £2.25
9 Fingers Rave Demo	(PDA033)	2 disk £2.25
Andys Workbench 3 Utils	(PDA031)	1 disk £1.50
CLI/SHELL Help	(PDA002)	1 disk £1.50
Protracker 3	(PDA046)	1 disk £1.50
Perspex Hypnosis	(PDA037)	1 disk £1.50
Benchmark Tests	(PDA035)	1 disk £1.50
Tetrus AGA	(PDA043)	1 disk £1.50
Clipart Disk 6	(PDAC06)	1 disk £1.50
Clipart 10 pack	(PDAC25)	10disk £12.50
CD ROM drivers (Ami)	(PDACD1)	1disk £1.50
CD ROM Bonus Utils	(PDACD2)	1 disk £1.50
V-Morph	(PDA051)	1 disk £1.50
Kefrans Desert Dreams	(PDA012)	2 disk £2.25
Grapevine 17	(PDA009)	3 disk £2.75
Last Stand On Hoth	(PDA014)	4 disk £3.25
Motorola invaders AGA	(PDA016)	2 disk £2.25
Fit Chix 2	(PDA034)	2 disk £2.25

UTILITIES

New!! Directory Opus 5	£59.99
GP FAX 2.3 software	£49.99
Prima A600/1200 Hard Drive setup software	£5.99
Xcopy Pro inc. hardware	£24.99

VIDEO AND GRAPHICS

Art Department Pro 2.5	£145.99
Art Department Scanner software	£99.99
Brilliance II paint and animation	£59.99
New!!Deluxe Paint 5	£69.99
Make Path for Vista	£8.99
Maxon Magic	£24.99
Personal Paint 4(oem)	£19.99
Real 3D Classic	£77.99
Special offer Lightwave	£399.99
Terraform	£8.99
Video Creator for CD32	£31.99
Vista Pro 3 (4Mb required)	£29.99
Studio Pro II (print software)	£59.99

WORD PROCESSING/DTP

Final Copy 2 (UK) Release 2 *NEW LOW PRICE!*	£48.99
Final Writer DTP *NEW LOW PRICE!*	£72.99
Penpal 1.4	£34.99
Pagestream 3 U.K. version	£249.99
Wordworth 3	£84.99
Wordworth 3.1 SE	£54.99
Kindword 3	£29.99

Amiga World calls it quits

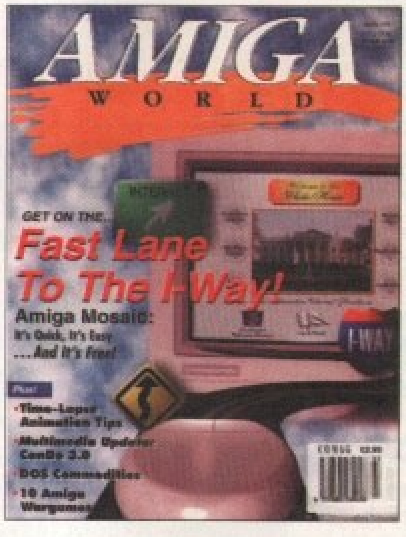
USA news

Denny Atkin reports on the decline of the US Amiga magazine industry

The first all-Amiga magazine, Amiga World, closed after the April 1995 issue, almost exactly ten years after the first issue hit the stands. That issue offered little hard information about the then new computer, and the graphics proudly displayed throughout the magazine seem positively primitive compared to what's being done on Amigas today. But to computer users of the day – weaned on Commodore 64s and CGA IBM XTs – they looked like digital masterpieces.

At one time there were 10 Amiga magazines in the US. With the death of Amiga World, due to fewer ads and a dropping number of subscribers, we're down to one Amiga magazine over here, and that hasn't been able to meet its monthly publication schedule lately. Luckily, we can still obtain *Amiga Computing* and lesser UK Amiga magazines, so US users aren't completely out of luck – although we get awfully jealous when we read of how much software and hardware support there is still available on your side of the Pond. Still, it's sad to see a magazine go that's supported the computer for a decade. R.I.P. Amiga World.

Amiga publishing isn't completely dead over here, mind you. There are a number of video-oriented magazines that still cover our favourite computer, as well as on-line publications (such as the well-known Amiga Report) and some speciality newsletters. One of the best of the latter category is Scientific Amigan, Walter Lounsbery's newsletter devoted to research, analysis, design, and technical education with Amigas.



The closure of Amiga World means only one Amiga mag left in the US

If you want to use your Amiga for more than saving Lemmings, you'll enjoy this fascinating look at how the Amiga can be used in science. Some of the material could easily fit in a dry, scholarly journal, but this newsletter also packs plenty of interesting opinion and neat ideas on new uses for your Amiga. For information, write to Scientific Amigan, P.O. 60685, Savannah, GA 31420-0685 USA; e-mail waltal@well.sf.ca.us; or call or fax (912) 898-1760.

last plane to NAB

Cutting it a little close, multimedia users needing expert advice and a look at some of the latest gear to aid in productions on all scales should consider heading for the nearest airport. The NAB Multimedia World is a Las Vegas-based show that is running from 9 to 13 April and covers a wide range of topics such as Video Toaster and Lightwave to seminars on how to use America's hottest DV equipment.

There are more than 100 of the world's leading multimedia developers and manufacturers on call to answer questions and offer advice on how to improve your productions. For more details, fax the organisers on 0101 301 216 1847 or e-mail them on register@nab.org.

Pyro mania continues

After receiving glowing accolades from this humble magazine, VCE Inc are releasing the sequel to Pyromania, aptly titled Pyromania 2. Following in the footsteps of its predecessor, the special effects compilation is made up of 37 Quicktime movies, 1736 PICT files representing 16 PICT sequences, and three fire loops. The new visual trickery that can be incorporated into Lightwave and other packages is made up of fire, smoke, fireworks, and more.

All footage was shot on 35mm motion picture film and, if it's anything like its forefather title, should be something rather special. To order by fax, call 0101 818 362 3490.

Premature PC – too soon for its own good

Utilities Unlimited's PC emulator for the Emplant board, the E586DX, has finally shipped. Unfortunately, it seems that's not a call to rejoice. Jim Drew and company seem to have jumped the gun on this one, as the current emulation is incomplete and problem-plagued. Like the first release of the Emplant Mac emulator, compatibility problems abound and documentation is minimal. Drew assures me that the problems will be addressed very soon with a new revision of the emulator ported from the PowerPC version he's been working on – this update should be smaller (500K versus 1.4MB) and more compatible.

To UU's credit, though, while the first release of the Emplant Mac emulation was a disaster, the current revision of the emulator is a fine-tuned, highly compatible system that does a great job running the vast majority of Macintosh software. Given time, the E586DX emulation will likely be similarly capable.

The $99.95 module (which requires the Zorro II-based Emplant board, which starts at $279.95) is supposed to support the entire Pentium instruction set, including protected and virtual modes. The sales literature claims the emulation supports MDA, CGA, EGA, VGA, and SVGA video modes, sound, hard and floppy drives, CD-ROM drives, SCSI devices, joysticks, and other PC features. Advertisements feature the emulation running Doom II and Windows.

The emulator that shipped to users in mid-March, though, didn't run Doom II or Windows. In fact, as this was written (about a week after the E586DX release), users on the online networks and Internet reported success-only in running DOS, some old games, and text-based programs like WordPerfect. Even getting those running was a challenge, though, since Utilities Unlimited shipped the product without the BIOS ROM necessary for PC emulation – they had problems licensing a BIOS in time for release.

Drew says he's writing a custom BIOS for the E586DX, but in the meantime users need to find a real PC to borrow a BIOS chip from, or download BIOS images from PC manufacturer bulletin boards or from FTP sites such as american.megatrends.com.

Also missing from the first release are serial and parallel port support, SVGA support (there are no drivers for custom Amiga graphics cards), and the ability to turn on the full CPU transcription mode that promises to make this faster than other PC emulators. Many users also reported problems getting CD-ROM support to work.

In short, this product was released before it was completed. Given the precipitous state of the US Amiga market, UU may have felt pressure to just get it out the door and prove that it was on the way. Whatever the reason, the PC Emplant just isn't very useful yet. But Jim Drew's track record with the Mac emulation suggests he'll get the PC emulation running smoothly in short order. It should be in better shape by the time you read this. Your best bet is to contact UK distributor Blittersoft and see if updated software is available.

The E586DX module is available from Utilities Unlimited, 790 N. Lake Havasu Avenue #16, Lake Havasu City, AZ 86403 USA. Phone (602) 680-9004, or fax (602) 453-6407. It's distributed in Europe by Blittersoft, phone (0)1908 261466, fax (0)1908 261488, or e-mail plesurf@cix.compulink.co.uk.

Flight of fantasy?



No... with a Blizzard or Cyberstorm Accelerator, your Amiga will fly!

If you've ever sat and waited for your Amiga to catch up, you'll know that an extra boost of power would be just the ticket.

But, the only problem is the cost... isn't it?

Well not any more. When you compare our cost per MIP with other boards you'll be surprised at just how little you'll have to pay to enhance the performance of your Amiga computer.

Then, the sky's the limit!

BLIZZARD 1220/4 4Mb TURBO

The multi award-winning 1220/4 offers by far the best price/performance ratio of any A1200 32-Bit RAM expansion on the market. Of course the 1220/4 also incorporates everything else that a good memory expansion should too, such as a Real Time Clock, further RAM expandability, optional FPU etc. as well as offering a Clock Speed Doubling Circuit which runs the 32-Bit FAST RAM at an amazing 28MHz. Not only does the 1220/4 give Amiga A1200 owners all this, but the price has broken the sound barrier too!

- Integrated 28MHz 68EC020 32-Bit RAM Clock Speed Doubler for up to 300% overall performance increase
- Factory Installed/Tested 4Mb of 32-Bit FAST RAM
- Expandable to 8Mb with Add-4 Board
- Integrated Battery Backed Real Time Clock
- Easy Trapdoor Installation, retains CBM Warranty
- Can be disabled in situ for full games compatibility

1220/4 Turbo 4Mb 32-Bit Fast RAM 28MHz 680EC20 CPU	£229.95
Add-4 Board (extra 4Mb for 1220/4) 4Mb 32-Bit Fast RAM add-on	£169.95
Motorola FPU 68882 PLCC 25/33MHz	£Call

NEW... BLIZZARD 1230-III TURBO ACCELERATOR MEMORY

The NEW BLIZZARD 1230-III TURBO ACCELERATOR MEMORY BOARD is the highest performing 68030 accelerator for the A1200. With its rapid 40 MHz 68EC030 CPU, or faster still 50MHz 68030 with MMU, it offers up to 500% performance increase overall. The 1230-III has further expansion options with its integral Fast Expansion Bus for Add-on Modules such as the SCSI-2 Controller (due for release early '95). With its industry standard SIMM socket it provides up to 32Mb of auto-configuring 32-Bit FAST RAM.

- PGA FPU Socket up to 50MHz
- Instruction & Data Burst Modes
- Automatic, Kickstart Re-Mapping (can be disabled if required)
- Battery Backed Self Recharging Real Time Clock
- Easy Trapdoor Installation

1230-III Turbo 0Mb, 40MHz 68EC030	£189.95
1230-III Turbo 0Mb, 50MHz 68030 & MMU	£229.95
SCSI-II Module for 1230-III	£TBA
Motorola FPU 68882 PGA 25/30/50MHz	£Call
4Mb SIMM RAM Expansion 32-Bit, 72 pin	£Call
LARGER SIMMS AVAILABLE	£Call

NEW... CYBERVISION64 GRAPHICS BOARD

For all Zorro-3 Amigas this 64-Bit high speed graphics engine/blitter has up to 1600 x 1200 pixels in 8-Bit colour or 1024 x 768 pixels in 24-Bit True Color, 2Mb of display memory (4Mb user upgradeable). Call and request our technical brochure. **Just £299.95**

FASTLANE Z3 SCSI CONTROLLER

Lightning FAST DMA SCSI-II interface for Amiga A4000 owners. Expandability up to 64Mb. of 32-Bit Fast RAM. Doesn't require any 'Buster Chip' upgrades. Use with hard drives, CD Rom etc **£299.95**

BLIZZARD 4030 ACCELERATOR

FULL 50MHz 68030 with MMU ACCELERATOR for Amiga 4000 030's. Replaces the A4000's CPU and offers an FPU option. Approx. 50% overall performance increase when fitted with 50MHz 68882 PGA FPU. **From £219.95**

NEW... CYBERSTORM 060 A4000 ACCELERATOR

Upgrade your A4000 030 or 040 with the new CYBERSTORM MODULAR ACCELERATOR, and you'll have **"The Worlds Fastest Amiga"**. With its new 50MHz **68060** CPU (due February '95), it provides up to 10 Times the performance of standard A4000/030s (82.2 MIPS, compared to 15.4 MIPS!). Optional SCSI-2 and Ethernet I/O Module. Call and request our 4 page technical brochure. **£PHONE**

The Blizzard Performance Advantage...

Just look below to see how well your Amiga really could fly!



The above are MIPS comparative performance figures using SysInfo.

gordon harwood computers
the UK's favourite Amiga Dealer

POST, FAX or PHONE YOUR ORDER TODAY!
Tel: 01 773 836781
Fax: 01 773 831040

Mr/Mrs/Miss/Ms: Initial(s): Surname:

Address:

County (Country) Postcode:

Daytime Phone Evening Phone:

Items required: Card holder's signature:

Card No.:

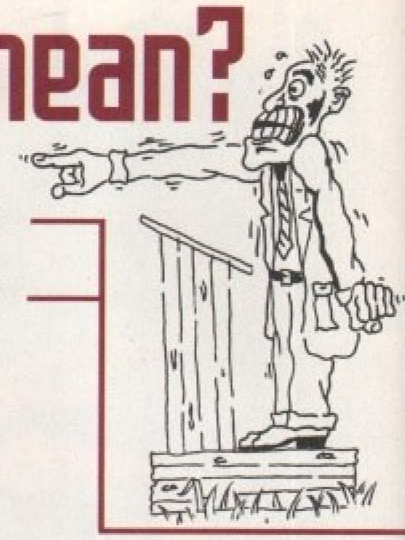
Expiry Date: Issue No.(Switch Only): Department: aco

Cheque/Bank Draft/Postal Order for £ ______ : ____ payable to Gordon Harwood Computers Limited...

(All prices are UK including VAT and postage. Overseas customers please call to confirm pricing before ordering)

Gordon Harwood Computers Limited. New Street, Alfreton, Derbyshire DE55 7BP. Tel: 01 773 836781 Facsimile: 01 773 831040

What does it all mean?



Paul Austin puts the Internet into perspective, with a rough guide to exactly what all the fuss is about

It's big, it's clever, but what the hell is it? And what exactly will I actually get out of it – apart from the kudos of quoting an e-mail address once in a while.

If you listen to pretentious ramblings of media, you'd be quite right to envisage the Internet as a pseudo intellectual utopia, where access guarantees a near psychedelic experience – what a load of old cobblers!

What it does provide is a means for mere mortals to get the one thing which increasingly makes the difference between the haves and the have nots in the modern world. In short, access to information.

It's obvious from the *Amiga Computing* mail that the average reader is getting just a little cheesed off with the seemingly endless supply of mind-boggling acronyms and buzzwords that make up this ethereal electronic soup.

Basically, if you strip away the hype you're left with five key areas, each of which boasts its own collection of utilities and applications to help control and access the information you send and receive.

E-mail

E-mail and your individual address is the basic element in the equation. For example, ezra surf's address is *ezra@acomp.demon.co.uk*, and in affect this works just like a virtual PO box number. Literally everything ezra sends and receives has to quote this unique address, and if you've got internet access, a modem, and a phone line, you can send him e-mail from anywhere on the planet – but please don't.

Better still, he can dial-in from anywhere, quote his password and account details and download all the mail sent to him. The actual information is constantly maintained and updated for you by your internet provider – in this case Demon Internet. When ezra next logs-on, Demon knows when he last downloaded mail and will check the in-basket and send anything still pending.

FTP sites

In short, an FTP site is the Internet's name for a freely accessible software archive. When you log-on to an FTP site you're actually directly accessing someone else's hard drive.

This becomes obvious when you run utils such as GUI-FTP. On one side of the screen you'll see your directories, and on the other will be the list of directories and files at that particular site. If you see something you like, select it and copy it across – it's that simple. There are literally thousands of FTP sites all over the world, some of which have dedicated Amiga sections known as the Aminet.

Gophering

Actually visiting all the FTP sites individually would be impossible, and that's where utilities like Archie and Gopher come into their own. Both offer an automated search facility. Archie will search for keywords within a list of FTP sites and files maintained by your provider, whereas Gopher provides a point-and-click search facility of Gopher-specific FTP sites via an Amiga Guide front-end.

Basically, both provide an invaluable means of filtering file information, allowing you to find and get what you as quickly as possible.

Newsgroups

This is where the truly weird and wonderful make their mark. Strange, surreal, interesting and in some cases outrageous is definitely the order of the day. If you're interested in a particular subject, no matter how obscure, I guarantee there'll be a newsgroup dedicated to it – and even if by some bizarre quirk of fate there isn't, you can always start one...

Newsgroups are probably best described as off-line, topic-specific, citizens band e-mail. Confused? So you should be. Basically, when you subscribe to a newsgroup you become a member of a band of like-minded individuals, each of whom automatically receive all the new news posted in that particular group every time they elect to get their news.

When you actually get news via nntptransfer, the software checks which groups you're a member of then grabs all the new postings since your last visit. You can then reply directly to another member, comment on a message, or post your own messages of files.

Well, that's the basics. There are many more involved but the point is, don't be put off, get involved, and most important of all have fun.

Web browsing

A web browser such as AMosaic offers a similar means of filtering and navigating the net, however Web browsers filter information rather than files.

When you read an Internet article you'll invariably come across a screen shot of a Web browser. In short, browsers are the pretty face of the internet.

Like users, Web pages have their own addresses and all you need to do is enter an address into your browser and you'll go directly – or at least indirectly – to information you need.

For example, if you're interested in a new sports car the motor sports homepage would seem a logical place to start. From there you might click on a hypertext button for new models, which in turn might have a link to a review of the latest Porche, and so on...

That's how the majority of Web pages operate – you simply browse around for related links until you reach the precise information you need. And of course, if you find a page you'll want to visit regularly, it can be added to your hotlist and then visited directly whenever you feel like it.

The AC team

EDITOR	Paul Austin
DEPUTY EDITOR	Darren Evans
ART EDITORS	Tym Lecky
	Terry Thiele
NEWS EDITOR	Adam Phillips
PRODUCTION EDITOR	Judith Chapman
STAFF WRITERS	Jonathan Maddock
	Tina Hackett
	Gareth Lofthouse
	Dave Cusick
ADVERTISING MANAGER	Simon Lees
AD SALES	Jane Normington
AD SALES	Sue Horsefield
AD PRODUCTION	Barbara Newall
MARKETING MANAGER	Claire Maudsley
PRODUCTION MANAGER	Sandra Childs
SYSTEMS MANAGER	David Stewart
CIRCULATION DIRECTOR	David Wren
COMMERCIAL DIRECTOR	Denise Wright
DISTRIBUTION	COMAG (0895) 444055
SUBSCRIPTION	051-357 2961
CHAIRMAN	Richard Hease
MANAGING DIRECTOR	Ian Bloomfield

Member of the Audit Bureau of Circulations

ABC 54,305

July-Dec 1993

Published by IDG Media
Media House, Adlington Park,
Macclesfield SK10 4NP
Tel: 0625 878888
Fax: 0625 850652

We regret *Amiga Computing* cannot offer technical help on a personal basis either by telephone or in writing. All reader enquries should be submitted to the address in this panel for possible publication.

Amiga Computing is an independent publication and Commodore Business Machines Ltd are not responsible for any of the articles in this issue of for any of the opinions expressed.

IDG MEDIA

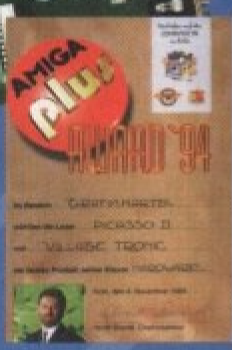
For six years *Amiga Computing* has been the leading magazine for Amiga enthusiasts. As a key member of the IDG communications group, *Amiga Computing* promises to inform, educate and entertain its readers each month with the most dedicated coverage of the Amiga available.

12 issue subscription £44.99 (UK), £69.99 (EEC) £84.99 (World)
Ongoing quarterly direct debit: £10.99 (UK only)

Printed and bound by Duncan Webb Offset (Maidstone) Ltd

Picasso II RTG





Picasso II RTG, the graphics board all others are measured against:

- Graphics board for all Amiga's with Zorro-Bus - Workbench driver to retarget all programs and WB to the Picasso
- Supports up to 256 colors with WB3.1, even on A2000 and A3000
- WB resolutions definable up to 1600 x 1280 pixels
- HiColor (16Bit) and TrueColor (24Bit) graphics: 16M colors!
- Drivers for most graphic programs such as AdPro, ImageFX, ImageMaster, Real3D
- Allows connection of any VGA or Multiscan monitor
- A1084 and A1081 are still usable with a special cable
- Black borders gone forever, takes full advantage of monitor's capabilities
- System-compliant implementation of monitorfile, resolution selec table using screen mode-requester
- Monitor-File compliant with System 2.x or higher, resolution selectable using screenmode requester
- View regular Amiga and special PicassoII-RTG screens on same Monitor without changing cables.
- Screen promoter to make older programs work on Picasso
- Draggable screens
- Available with 1MB or 2MB, upgra dable from 1MB to 2MB at anytime

2 MB **£ 299.95**

1 MB **£ 259.95**

AMIGA OS 3.1



A500/A2000 **£ 84.95**

A1200/A3000/A4000 **£ 94.95**

MainActor Professional

£ 49.95



Open your mind and dreams to the world of great animations, what Picasso users have been doing for a long time with the demo and full versions,you can do, too. MainActor Professional offers a high degree of functio-nnality including multi-platform support (i.e. .AVI and .FLI animation file formats

- Synchronize animations with sound effects
- Supports several graphic boards with special loader modules
- Uses 24Bit files
- Play animations directly from RAM or from hard drive
- Convert animations and picture formats
- Playable within a window on WB
- Complete ARexx-support
- Supports 14 different animation file formats
- Supports Video-For-Windows format
- Special, fast animation format for Picasso II

Pablo



The video module, Pablo, expands your Picasso II with two new video outputs. Using the Pablo, you can view your Picasso output on any TV or VCR. All with quality that you would only expect to see from broadcast video encoders. That is why the Picasso II video encoder module, Pablo, won in the (German) magazine 'Amiga Magazin' (issue 5/94) test for video encoders.

- Three cables included: RCA, S-VHS and SCART
- 5 floppy disks with drivers, animation demos and more
- 24Bit Animation program included
- 15kHz overload protection
- 2 well written manuals
- Plugs onto the Picasso II - no Zorro-Slot required
- Easy installation of video modes

£ 129.95

Liana

Are you in need of a fast and easy connection between two Amiga's? Liana, the low-cost network solution, is exactly what you want! Just plug it in, install the software, and it runs! Nothing could be easier than that. Liana is the network solution for those with a small budget and big needs. You can even share your hard drives and printers.

- For every (!) Amiga from WB 2.0 on with a free parallel port
- Includes cable
- Includes Commodore's Envoy networking software
- English manual
- automatically reconnection after (re-)booting without new startup
- Every machine usable as server and client

£ 59.95

VILLAGE TRONIC

Wellweg 95 D- 31157 Sarstedt - Germany

Tel. +49/(0)5066/7013-10	technical Hotline
Tel. +49/(0)5066/7013-11	Orders
Tel. +49/(0)5066/7013-40	Mailbox
Tel. +49/(0)5066/7013-49	FAX

Blittersoft

Blittersoft • 6 Drakes Mews • Crownhill • Milton Keynes • Buckinghamshire • MK8 0ER

Order Line	+44 (0) 1908 2614-66
Queries/Technical	+44 (0) 1908 2614-77
Fax	+44 (0) 1908 2614-88
BBS	+44 (0) 1908 2614-99

VIDEO PRODUCTS

BROADCASTER ELITE

This Zorro III card performs the major functions of a **Broadcast Quality, On-Line, Non-Linear, Digital** Video edit suite (CCIR601 720 x 576 resolution) . It provides REAL-TIME, FULL MOTION JPEG (50 fields / second) Capture & Compression, direct to disk. The video can be edited and played back in REAL-TIME, at 50 fields/sec in broadcast quality - direct to Betacam etc. The board has full LTC and VITC timecoding (on all connectors - Composite, Y/C and YUV). It also interfaces with the AD516 Studio 16 and NEW Amadeus 16-Bit audio cards to enable simultaneous audio and video editing. It requires an Amiga 4000 with full 68040 processor, large SCSI-2 hard drives, and fast SCSI-II controller.

Complete System - From £11,950 plus VAT
BroadCaster Elite Card £ 4098 plus VAT

System Requirements (minimum) :-

Amiga 4000-030 or 4000-040 (2 +8Mb,0.5Gb HD)
Broadcaster Elite (Zorro III Card) with Software
Warp Engine 28MHz with SCSI-II or Fastlane Z3
2.1Gb Fast SCSI-2 3.5" HD (For Video)
Sunrize AD516 or Amadeus (Audio Card)
MultiSync & PAL Monitors

GIVING FULL BROADCAST QUALITY, ON-LINE, NON-LINEAR, VIDEO & AUDIO EDITING !

All systems are fully configured and tested and are supplied with limited telephone support. Technical support is additional for purchase of individual cards.

FOR MORE INFORMATION, OR TO ARRANGE A FULL DEMONSTRATION, PLEASE CALL

Dealers - We are Exclusive UK Distributors

GVP TBC Plus TBC card with transcoding PAL/SECAM/NTSC etc. £ 595

G2 MSTC Multi-Standard TBC with full transcoding, genlocking etc. 19" rack £ 1749

VLab Motion Real-time JPEG Compression & Playback Video & Animation card £ 999

VLab Y/C Real-time Hi8 digitiser card £ 349

PAR - Personal Animation Recorder
Output Your 24-Bit Rendered Animations To Video Tape - At Broadcast Quality £ 1849
Video Capture Card - For PAR £ 999

Other Professional Video Products Available

SOFTWARE

LIGHTWAVE 3D V3.5 PAL		£ 449
ART DEPT. PRO.	V2.5	£ 149
REAL 3D	V2.4	£ 299
IMAGE F/X	V2	£ 195
PHOTOGENICS		£ 49
BARS & PIPES PRO	V2.5	£ 215
MEDIA POINT	V3.28	£ 219
TVPAINT 2 (Picasso / Retina / Harlequin / EGS)		£ 169
SCALA MULTIMEDIA 211 (AGA)		£ 95
SCALA MULTIMEDIA 300 (AGA)		£ 239
SCALA MULTIMEDIA 400 (AGA)		£ 289
SCALA MM 400 + ECHO 100		£ 385
MORPH PLUS		£ 149

Other Professional Software Available On Request

24BIT GRAPHICS CARDS

AMIGA 3000 & 4000 ONLY

CYBERVISION 64 ULTRA FAST
64-BIT, Zorro III, 1280x1024 - 2Mb £ 319
4Mb, Version of CYBERVISION 64 £ 399

RETINA BLTZ3 Zorro III, - 1Mb £ 459
RETINA BLTZ3 Zorro III, - 4Mb £ 599

AMIGA 1500/2000/3000/4000

PICCOLO SD64 ALPINE 64-BIT
RTG card 2Mb, Zorro II/III Switching £ 295
4Mb, Version of PICCOLO SD64 £ 345

PICASSO II 2Mb with TVPaint Jr. £ 295
RETINA 2Mb with VD Paint. £ 365
RETINA 4Mb with VD Paint. £ 465
OPALVISION Call For Latest Information

GENLOCKS

GVP G-Lock External Composite & S-VHS / Hi8 unit. S/W Controlled £ 265
HAMA 292 External Composite & S-VHS / Hi8 unit. RGB correction etc. £ 279
HAMA 290 External Composite & S-VHS / Hi8 unit. RGB correction, Picture Enhancement, Fade to Black, Keyhole. £ 679
G2 VIDEOCENTER VC1 £ 579
G2 GENESYS VIDEOCENTER £ 929
G2 VIDEOCENTER PLUS VC2 £1139
G2 VIDEOCENTER VC3 From £1399

Full Details Of HAMA & G2 Items Available On Request

REMOVABLE DRIVES

SYQUEST

88MB SCSI INT. 5.25" DRIVE	£ 279
88MB REMOVABLE CARTRIDGE	£ 59
105MB SCSI INT. 3.5" x 1" DRIVE	£ 255
105MB SCSI EXTERNAL DRIVE	£ 399
105MB REMOVABLE CARTRIDGE	£ 49
270MB SCSI INT. 3.5" x 1" DRIVE	£ 415
270MB SCSI EXTERNAL DRIVE	£ 569
270MB REMOVABLE CARTRIDGE	£ 59

Syquest Drives Supplied With A Cartridge

MAGNETO OPTICAL

IBM 230MB SCSI INTERNAL	£ 669
IBM 230MB SCSI EXTERNAL	£ 765
BOX OF 5 230MB MO DISKS	£ 179
SINGLE 230MB MO DISK	£ 39

DAT TAPE BACKUP

4MM SCSI DAT - 2Gb, Internal	£ 729
4MM SCSI DAT - 4Gb, Internal	£ 799
8MM Exabyte DAT - 3.5 / 7Gb, Int.	£ 1199

CD ROM DRIVES

TOSHIBA XM5201B SCSI-2 (Int.), 3.4 x Speed, Multi-Session (Tray Load) £ 179
PANASONIC CR533S SCSI-2 (Ext.), 2 x Speed, Multi-Session (Caddy Load) £ 195
POWER Ext. A1200 with Squirrel I/F £ 199

MPEG DECODER

SCALA MD100, Zorro II card. Play MPEG bitsreams from hard disk or CD. Can be controlled from SCALA MM300 & MM400. Includes encoding software. £ 599

EMPLANT

MAC / PC EMULATOR

Basic Version	£ 245
SCSI or AppleTalk	£ 295
Deluxe (Both)	£ 339

A4 SCANNERS

EPSON GT-6500 600dpi, 24Bit with s/w & Cable £ 699
EPSON GT-8000 800dpi, 24Bit with s/w & Cable £ 989

NEW SERVICES

We now offer a number of services to Amiga users :-
RENDERING frames from Lightwave, Real or Imagine
OUTPUT frames to video tape (VHS/S-VHS/Beta SP)
PICTURE Format Conversion (MAC/PC/AMIGA/SGI etc)
NON-LINEAR EDITING (VHS/S-VHS/Beta SP etc.)
DATA TRANSLATION (Syquest, MO, DAT, QIC etc.)

SPECIALISTS

WE OFFER SERVICE, AND AFTER-SALES BACKUP THAT IS SECOND TO NONE

DEMONSTRATIONS

DEMONSTRATIONS OF OUR HIGH END SYSTEMS CAN BE MADE BY PRIOR ARRANGEMENT.

DELIVERY CHARGES

Express Small £ 6
Medium £ 7
For large items, please call.

SURCHARGE

If ordering with ACCESS or VISA there is a 2.5% surcharge.
No surcharge for DELTA, CONNECT or SWITCH.

HOW TO ORDER

HAVE YOUR CARD DETAILS READY, AND CALL :-

01920 822321

9.30 - 6 Monday - Friday

BY POST :-

CALL FIRST TO VERIFY PRICE AND AVAILIBILITY, BEFORE SENDING YOUR ORDER TO :-

"WHITE KNIGHT TECHNOLOGY", P.O. BOX 38, WARE, HERTS. SG11 1TX



THE Cover Disks CD spectacular

A massive 547Mb of Amiga files await you on our exclusive Multimedia Toolkit CD. Plus our usual CoverDisk, with art for all ages from the complete and easy-to-use SmartyPaints program

Weird Science Multimedia Toolkit

Supplier: Weird Science

What's this on the cover of *Amiga Computing*! Yes indeedy (he says in dubious Ben Elton style), this one's for all you readers out there with CDTVs, CD32s or those nifty PCMCIA SCSI host adapters such as Squirrel.

If you check out the adverts in computer magazines, you will no doubt find a lot of CD titles are sprouting up with masses of Amiga gear on them.

Well, we managed to get our sweaty hands on one, and in conjunction with Weird Science we thought it would be a good idea to give it away, free, to all you wonderful readers because we love you so much.

Name game

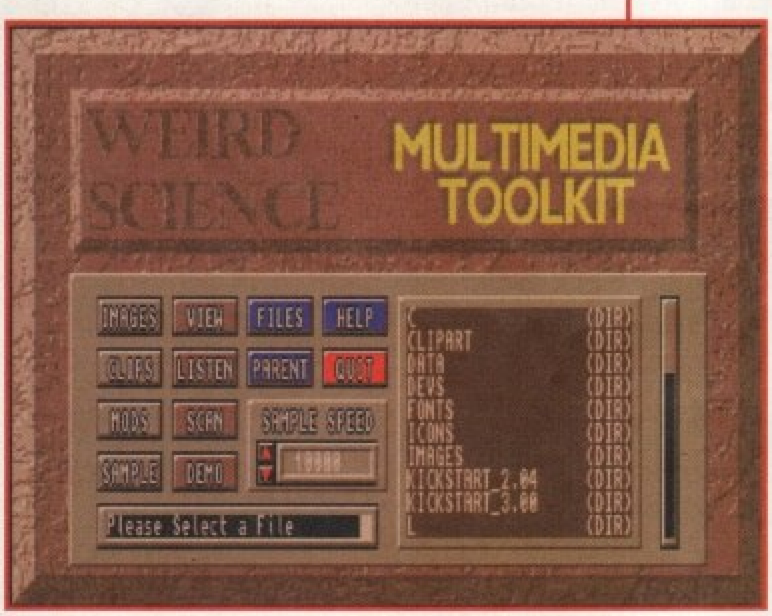
And just what is the name of this CD adorning your beloved *Amiga Computing* this month? Well, it's the Multimedia Toolkit with 547Mb of images, fonts, clip art, sound modules and samples.

If you dabble in DTP or use a word processor, there are thousands of fonts, images and clip art to help spruce up your artwork and documents. Or if you're a music nut who likes to create kickin' sound tracks with your favourite music tracker, there are thousands of complete music modules to listen to as well as samples for you to create your own music. You will also find two top music trackers to use.

To top it all off, there's half a megabyte of icons to replace those dreary defaults which Workbench provides you with.

To use the CD-ROM you will need





Using the Multimedia Toolkit Main Program, you can view and listen to the thousands of picture and sound files



To figure out what all those buttons do, click on the blue Help button. You are then in help mode and can click on any button for a description

either a CDTV, CD32 or an Amiga equipped with an adapter that allows you to connect CD-ROM peripherals, such as the Squirrel and Zappo devices.

There are two ways to access the files on the CD-ROM. For CDTV and CD32, as well as Amiga devices that allow you to boot from the CD-ROM, resetting your machine with the Multimedia Toolkit in the drive will automatically load the Multimedia Toolkit program.

Once loaded, you are given the choice of what device to use for the program (mouse or joystick). Click on either and you will then find yourself at the Main Menu. From here you can choose to access the Multimedia Toolkit Main Program, or fire up the slideshow to sit back and view the many pictures on the CD.

The Main Program provides you with an easy-to-use method of browsing through the files on the CD-ROM. With it you can view both images and clip art files, as well as listen to the thousands of music and sample files – all at the click of a button.

Copying

It also provides a simple file manager utility which supplies tools for copying files from the CD to your hard disk or floppy drive.

Using this, you can transfer files such as the huge collection of fonts to your fonts directory for immediate use by the appropriate programs.

To find out what the various buttons on the interface do, simply click on the blue Help button. This puts you in (yes, you guessed it) help mode. Now, clicking on any button will display a description of what that button actually does.

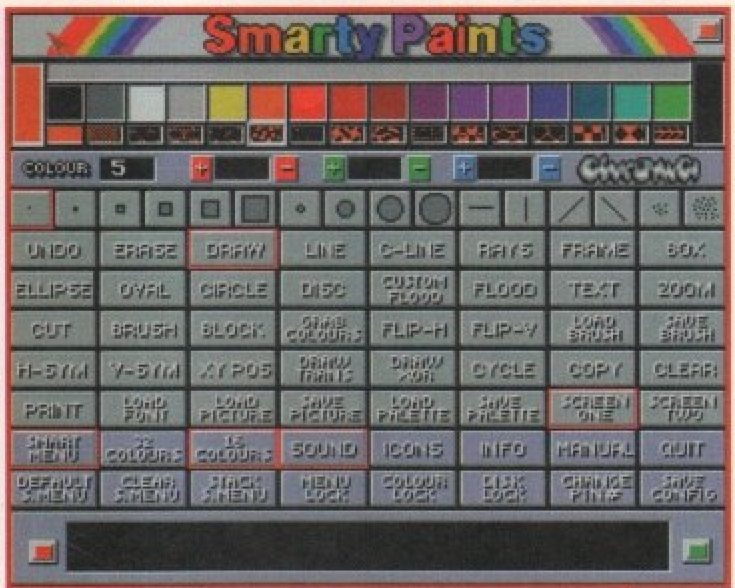
With 547Mb of files, I'd call that a well-stuffed CD. So, what are you waiting for? Fire up your CD-ROM drive, jam the Multimedia Tookit CD in it and see how long it takes you to view and listen to everything.

Bear in mind that although CDTV and CD32 owners can view and listen to the various images and sound modules on this CD, to transfer the files for use from the CD the appropriate hardware is required.

What on earth?

So, just what does this huge 547Mb of files consist of then? The following, that's what:

- 500 original 24-bit images with HAM8 and HAM Interlace versions
- Over 1300 coloured clip art
- More than 2100 Mono clip art
- 120 standard Amiga fonts
- 100 plus coloured fonts
- Over 100 Adobe fonts
- 80 PostScript fonts
- 750 music modules
- 2300 samples
- Utilities to view and listen to many of the files



There are lots of tools and features to aid the Amiga artist in the creation of an artistic masterpiece

SmartyPaints

Supplier: Chroma

When it comes to graphics, there's not much that can touch the Amiga's powerful capabilities. That's why you can find the Amiga generating the graphics for such TV series as Babylon 5 and Star Trek.

Because of this obvious strength in the graphics department, it's hardly surprising to find that there's quite a lot of graphics software available for the Amiga.

Most of these packages, you will find, tend to be aimed at users of intermediate or advanced experience, and the demands of such powerful packages also often require an Amiga with lots of memory and powerful add-ons – which are probably beyond the price range of many users.

Novice to expert

SmartyPaints is different, however. It's an art package that caters for users ranging from a young child, right up to intermediate level. You may ask how such a wide range can be catered for by one art package, and the answer lies in the 'smart menu' feature which allows you to customise SmartyPaints depending on the needs of the user. It can also run on Amigas with a minimum of 1Mb, although the more memory you have the more screens you can work with.

SmartyPaints has evolved from early 1990 where it was available for the Nimbus PC as the Borealis trilogy of schools' art programs. Borealis Jnr was aimed at infants, Borealis was for 7-11 year olds and Borealis Gold was for adults. It is thus a natural progression from these early concepts and now serves all three age groups, thanks to its smart menu facility.

This facility allows the owner to tailor the drawing tools icon display according to age groups and abilities. SmartyPaints is not designed to be immediately used by a small child without any adult intervention.

It initially loads with all menus, icons and functions set up for a user with intermediate knowledge. It therefore needs to be configured for individual children according to their abilities before they are given it. Configuring the menus is very simple. To try it out, load up SmartyPaints and read the tutorial that follows. Once loaded, you will see there are many function icons to choose from. In this particular mode, all features and tools are available for the intermediate user.

For a small child, you can choose which drawing tools should be displayed by altering the smart menu. If you now click the right mouse button you will be taken to the drawing screen and as you can see, there is a selection of tools and palette icons to choose from.

This is the smart menu and can be removed while drawing on the screen by clicking again on the right mouse button. Another right mouse click will bring it back again. Depending on the configuration you have set, there will also be a Main menu icon button on the far left of the screen. Clicking on this will take you back to the main menu.

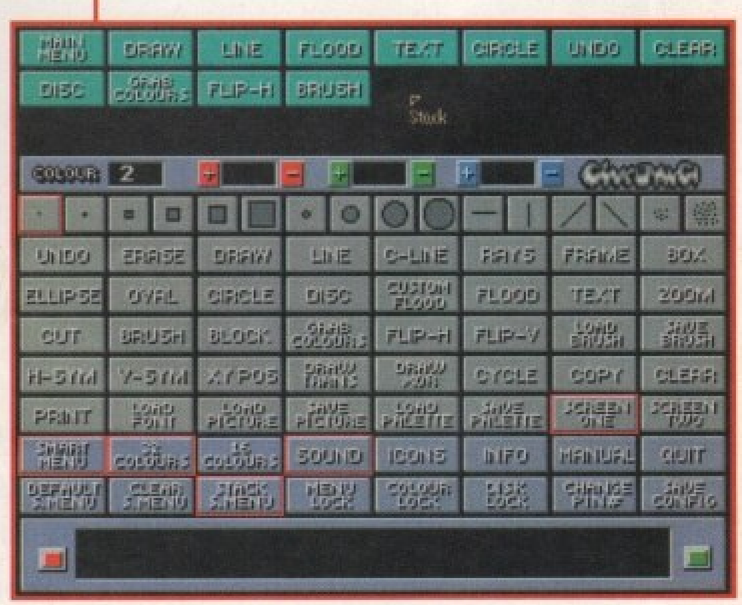
If you have a small child, so wish to create a special 'kids version' of the program, you need to decide which tools are appropriate for their age.

Indicators

Once you have a list of appropriate tools, it may be a good idea to draw a simple layout design to indicate which tools will be grouped together etc. This needs to be done because when you are choosing tools to be included in your custom menu, they are added from right to left, top to bottom. SmartyPaints doesn't allow you to arbitrarily remove and replace a single icon from within the middle of a list.

Once you have a design for your custom layout, it's time to configure SmartyPaints. First of all you will have to clear the default smart menu, so click on the light blue icon marked Clear S. Menu. After a brief delay, the current smart menu will be displayed in blue at the top of the screen.

You may now click on each icon to erase it from the list (be sure to click on the lower



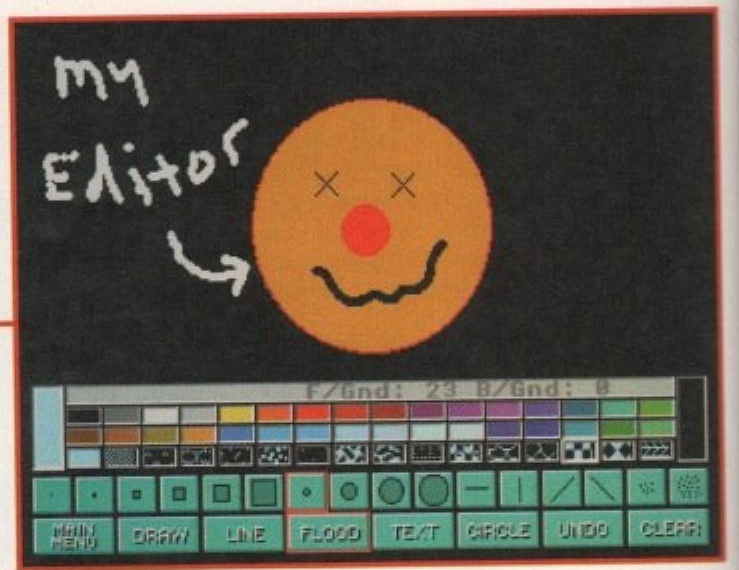
At the top of the screen, in a nice shade of blue, is a custom smart menu under construction



Assembler series files

For those budding coders out there following our regular Assembler programming series, this month's example files can be found on the SmartyPaints disk in the drawer called AC_CoverDisk_Files.

The drawing screen and smart menu bar, complete with a little something I prepared earlier!



SmartyPaints graphics competition

Now that you have a versatile art package at your fingertips, why not create some of your own masterpieces and enter our great competition?

All you have to do is send in any number of pictures created (at least partially) with SmartyPaints on a standard AmigaDOS formatted disk, along with the registration card you receive when you buy the SmartyPaints manual (see disk offers).

There's no age limit, but age will be taken into consideration when judging the entries.

The prize

The winner will receive an Amiga bundle of goodies which include the following:

- 3.5" Amiga floppy disk drive
- 50 floppy disks
- A disk storage box to keep things tidy
- A pair of Screenbeat 3 stereo speakers. Great for playing games
- A cuddly cute Amiga mouse
- A cartoon mouse mat

All entries must be in by the 29th of June.

Send your entries to SmartyPaints Competition, Chroma, 153 Holt Road, Fakenham, Norfolk NR21 8JF.

Name:..

Address:..

....

.... Postcode: ....

Tel:.. Age: ....

right of each button icon). Notice that it's not possible to delete the Main Menu button. This is because you will always need some way of returning to the main menu screen.

Once you have deleted the icons you don't need, click again on Clear S. Menu and you will see the smart menu disappear. If you now click on the right mouse button to revisit the drawing screen and smart menu display, you will see that the buttons you erased have indeed gone from the smart menu.

Availability

Click on the Main Menu button and we will now add our own buttons to the smart menu. Click on the Stack S. Menu button and the smart menu will again appear at the top of the menu (minus the buttons you erased earlier). Now, by clicking on any of the light grey icons you can choose which functions will be available within the smart menu. As you click on each function, you will see it appear in the smart menu displayed at the top of the screen.

Continue adding functions until you are satisfied with the list that is going to be available for the smart menu, then click on Stack S. Menu to finish. If you click the right mouse button now, you will be taken to the drawing screen and will see the smart menu now contains your custom functions.

You may now click on the Save Config icon from the main menu to save your smart menu layout, and SmartyPaints will load your smart menu automatically when it's run.

Of course, we all know how small children like to explore and experiment, so we now need some way of preventing them from accessing the main menu and messing up things like your PIN number, or accessing other inappropriate functions.

Once you have your custom smart menu for your five-year old artist or whoever, clicking on Menu Lock will disable the Main Menu icon button from the smart menu. For security, you will be asked for a PIN number to enter before the function is executed. The default PIN number is 1234, but this can be changed to your own personal number by clicking on the Change PIN # button. You will be asked to enter your new PIN number twice for confirmation and then the number will become permanent. Keep a note somewhere of the new number so you don't forget it.

When you have entered the PIN number for the Menu Lock function, go in to the drawing screen with the smart menu and you will notice that the Main Menu button will disappear, preventing your child from accessing the main menu. SmartyPaints is now in 'kid proof mode.'

If at anytime *you* wish to access the main menu for some reason, a secret 'hot key' lets you gain access. Simply hold down the Help key and the letter M until the main menu appears.

You can now click on Save Config and your SmartyPaints disk will always load up in 'kid mode' (until you alter things of course).

That's it. Now you can customise your SmartyPaints art package for either yourself or your little one to play with.

SmartyPaints manual and disk offer

There are many more features available in SmartyPaints, so to get the most from this versatile and educational program, you can send off for the printed SmartyPaints manual and disk. The disk contains lots of kids clip-art for your child to create their own pictures. For details of this special offer, **turn to page 44**

Faulty CoverDisks

If you should find your *Amiga Computing* CoverDisk damaged or faulty, please return it to: TIB Plc, TIB House, 11 Edward Street, Bradford, W. Yorks BD4 7BH.

Please allow 28 days for delivery

Next Day **£5.00**
2-3 Days **£2.50** Saturday **£10.00**
Deliveries are subject to stock availability
Allow up to 7 days for cheques to clear

POWER

TELEPHONE **01234 273000**

POWER COMPUTING LTD
44a/b Stanley St. Bedford MK41 7RW
Tel **01234 273000** Fax **01234 352207**

CD-ROM

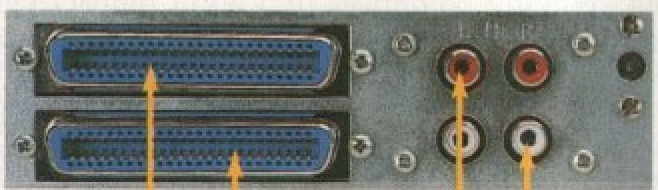
NEW CD-ROM INC. CD32 EMULATION



£199
x2 CD-ROM

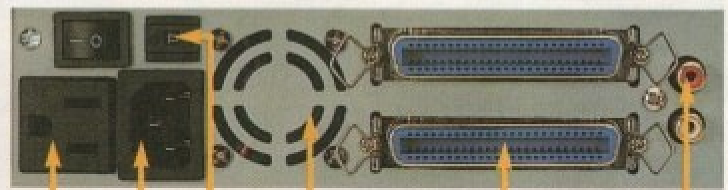
DOUBLE SPEED CD ROM





£299
x4 CD-ROM

QUAD SPEED CD ROM



POWER CD-ROM

The new Power CD-ROM for the Amiga 600/1200 plugs directly into the PCMCIA port and provides a direct SCSI-I and SCSI-II interface, allowing up to six additional peripherals to be connected, for example: Syquest Drives, Hard Drives, Flatbed Scanners and Dat Drives. What's more the Power CD-ROM features a 'Hot-Plug' and 'Un-Plug', which allows you to connect/disconnect at any time the Power CD-ROM and any additional devices, even when your Amiga is switched on..

The CD-ROM comes with a SCSI interface, PSU, manual, audio lead, mains lead* and software: Audio CD, CD32 Emulation, MPEG Film Decoder and PhotoCD software.

COMPARISON CHART

	POWER	OTHER
DOUBLE SPEED, MULTI SESSION	✔	✔
MAX TRANSFER (INTERFACE)	3MB	1.5MB
CD32 EMULATION	✔	✔
NUMBER OF SUPPORTABLE DEVICES	7	1 OR 2
THRU PORT FOR ADDITIONAL DEVICES	✔	-
HIGH QUALITY METAL CASING	✔	-
FULLY SUPPORTS 'HOT UN-PLUG'	✔	-
AUTOMATIC BOOTING OF CD-ROMS	✔	-
CD + AMIGA SOUND MIXING FACILITIES	✔	✔
COMPATIBLE WITH ACCELERATOR CARDS	✔	?
12 MONTHS WARRANTY	✔	✔
COMPLETE WITH UTILITY SOFTWARE	✔	-
COST	£199	£199

Amiga 600/1200

Double - Speed CD-ROM £199

Quad - Speed CD-ROM £299

Amiga 4000 No SCSI Interface

Double - Speed CD-ROM £159

Quad - Speed CD-ROM £259

Accessories

Amiga 4000 SCSI-Interface .£129

Multi-media Speakers 80 Watt £54



80 WATT SPEAKERS £54

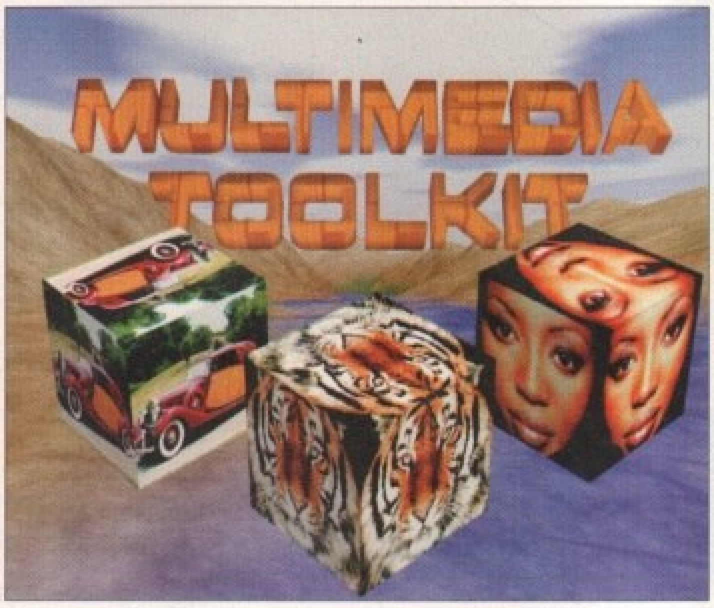
*U.K. only

Trade and Educational orders welcome - Worldwide distribution available

Weird Science

Weird Science Ltd. 1 Rowland Close, Leicester, Leicestershire LE4 2SE
Telephone 01116 2340682 Fax 01116 2364932

SPECIAL OFFERS



Multimedia Toolkit 2

Introductory offer for readers of Amiga Computing

From ~~£29.95~~ to £24.95

Offer ends May 1995

New Release

Multimedia Toolkit 2

Following on from the highly succesful Multimedia Toolkit (featured with this magazine) is the NEW Multimedia Toolkit 2. Multimedia Toolkit 2 comprises of TWO Compact Discs for the multimedia Professional. Over 1.2 gigs of the very best graphics and sound awaits. This double CD set has been geared towards the music and video professional with 500 new 24-bit images of backdrops and textures. Ham8, 256 and 16 colour versions included for use with Scala. Octamed 5.04 Full Version (wirh Aura support), support files from many Octamed experts such as modules and samples. Over 50 megs of Midicraft midi files, samples and modules. (Midicraft are professional musicians producing Compact Discs such as 'A Drop in the Ocean', described below.) 200 megs of Imagine and Lightwave objects and support files. Thousands of items of Clip art, Fonts, Samples, Modules and Midi files. Plus many, many tools and ultilities to improve your multimedia presentations. All the items are available direct from the Compact Discs with Octamed running straight from the CD.

Absolutely outstanding quality and value for money.



Nexus Pro CD

Reference Library CD-ROM
300 New 24-bit backgrounds
150 Original images
470 Compugraphic fonts
80 16-bit samples

From ~~£49.95~~ to £39.95
Offer ends May 1995



A Drop in the Ocean

by The Craft Brothers
A music Compact Disc completed entirely on the Amiga coupled with some very high quality musical instruments and an awful lot of talent.

Special Offer at only
£10.99

Weird Science Additional Offer

£5.00 off

all orders over £20.00

excludes CDs on this page
Offer ends May 1995

Head office

Lots of people have good ideas for making money, but very few of us actually do anything about them. How many of us, for example, have heard about a new product or service and cried plaintively: 'Hey, that was my idea !'

Getting a dream idea off the ground will take drive, imagination, hard work and persistence, and unfortunately your home computer will be no help whatsoever in these departments. However, organisation and presentation are equally important ingredients in the recipe for success, and in this respect the Amiga could be invaluable – even if you are starting on a shoestring.



The three major packages available are not new products, but they can now be picked up at cheaper prices than ever before – making them worthy of consideration for anyone taking their first tentative steps into the world of small business.

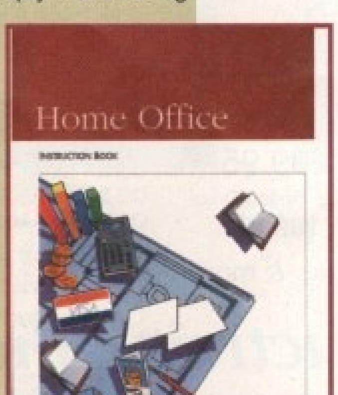
ASSESS YOUR NEEDS

The PC has become such a common feature in the workplace you'd be forgiven for thinking that starting a business without Microsoft's Windows is like deep diving without an air supply. Yet these machines are expensive; even if you get a cheaper (and consequently less reliable) make with all the software bundled in, it's a big financial commitment to take when initially testing the water for your project's viability.

Whether you start out with one of the all-in-one packages reviewed, or choose pricier but more professional options like Wordworth 3.1 and TurboCalc, the Amiga's virtues as a machine for small business should not be overlooked.



Remember, many business needs can be catered for very cheaply: Advertising leaflets, business correspondence, client databases or spreadsheets need not always be flashy to be effective or efficient. What's more, even if your business outgrows your software's capabilities, these packages will already have paid for themselves within the first few months.



Mini Office

Europress's Mini-Office carries the distinction of being the only truly integrated business package of the bunch – the rest are really composed of separate programs thrown together into a bargain bundle.

It's also the most comprehensive product of the lot, thanks to the fact that it included the five most commonly needed types of business program, all accessed from one main menu.

The word processor is more capable than might be expected at the price. There's a 50,000 word dictionary, the option to import ASCII text, the basic text formatting facilities, and wrap-round text. Alongside Digita's Wordworth SE it may look rather unsophisticated and lacking in advanced features, but it makes a good account of itself as part of the overall package.

Databases are an equally indispensible type of business software, so it's good news that this one is easy to use with all the standard sorting functions included. A less obvious but undoubtedly useful inclusion is the disk utilities program which acts as a basic file manager so you can keep



Colourful icons and an integrated system make Mini Office the most enjoyable package to work with when it comes to swapping between programs

Home Office Deluxe

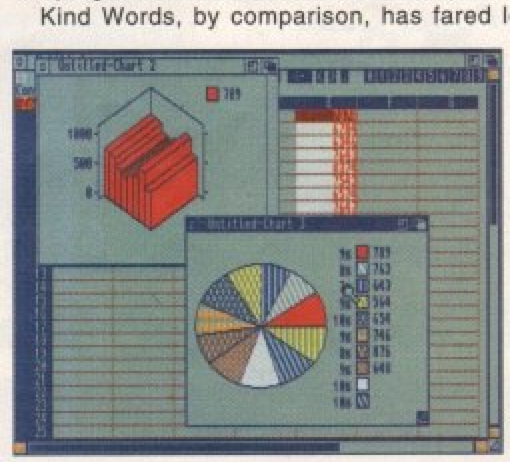
The main strength of Disc Company's Home Office Kit has got to be the inclusion of the highly respected Maxiplan 4. For a long time the unchallenged leader in its field, this feature-packed spreadsheet analyser would still be many Amiga accountant's first choice.

Considering the price, Maxiplan is amazingly powerful and flexible. Allowing users to create spreadsheets of more than 500 columns and 65,000 rows, and featuring extensive linking, analysis and import/export facilities, it is a must for anyone requiring advanced functions at an affordable price. The availability of Macros to automate repetitive tasks is also a definite boon.

Maxiplan includes a colour chart creator, which means that as well as crunching numbers it can present your data professionally. This aspect of the software is admirably simple, as usually you can select a range of data and a type of chart and the program will do the rest automatically.

Kind Words, by comparison, has fared less well with time. Inferior to Digita's Wordsworth 1.1 when it came out all those years ago, it certainly can't compete with the power of the budget WordWorth SE released recently.

That's not to say it's worthless – if your word processing needs are basic it will probably prove perfectly adequate. Though it's a bit long in the tooth, it does use Digita's Human Interface Protocol, which in English



No one's pretending spreadsheets are exciting, but at least Maxiplan delivers a bunch of powerful presentation tools

your work organised. Spreadsheets, by their nature, are not so simple to use as, say, databases, but at least there are keyboard shortcuts as well as menus to work with. What is appealing is the way data can easily be taken from the spreadsheet and made into a graph, which in turn can be imported into the word processor as part of a document.

Like the Lotus Suite on the PC, Mini Office maximises ease of use by maintaining a consistent control system through each of the sub-programs. The video recorder-style toolbar isn't brilliantly successful, but it's nonetheless strange that more developers haven't attempted a similar approach on the Amiga.

It has to be said that the package is looking slightly dated now, and the inclusion of a few new features would not go amiss. The Amiga needs an integrated package like this, so it's a shame that Europress has not seen fit to develop a new update – in my view, doing so would justify a higher price. For some, however, Mini Office remains a better option than other more expensive alternatives – and that's despite its age. Its ease of use and uniform control system should make it attractive to those who find some aspects of computing daunting, and as an all-rounder there is still nothing to beat it at this price.

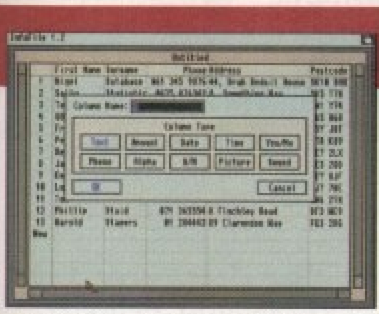
The bottom line

Product: Mini Office
Price: £59.99
Supplier: Europress Software
Tel: 0625 859333

Ease of use	**9**
Implementation	**7**
Value for money	**8**
Overall	**8**

Great things often come from small beginnings, particularly true for successful entrepreneurs. For those with big ideas but empty pockets, Gareth Lofthouse reviews three business packages under £50





Building up a database starts here by defining the columns and types of information with this control panel

means it's easy to control.

In the printing stakes, Kindwords lack of support for Postscript fonts is quite a serious flaw, and advanced features like auto-correct were but dreams back in those days. Still, you get what you pay for.

Infofile makes up the third and final part of the package, and it turns out to be a rather strange little program. Primarily, it's a simple database that allows even technophobes to knock up information records within minutes. Columns and rows can be moved and resized using the mouse and, for those daunted by Maxiplan, it also includes basic calculation options.

That's all very dull and handy, but what's peculiar is the option to create an automated slideshow with sound using Infofile – especially since this is set up using the same database interface. Why this was included in the same package I'm not sure, but who knows, it might prove useful,

If serious financial analysis is a must for your business then Maxiplan 4 should make you give this package more than a cursory glance. Since it's available separately for £30, however, you may decide not to bother with the whole bundle.

The bottom line

Product: Home Office Kit Deluxe
Price: £69
Supplier: Silica
Tel: 0181-309 1111

Ease of use	**8**
Implementation	**7**
Value for money	**7**
Overall	**7**

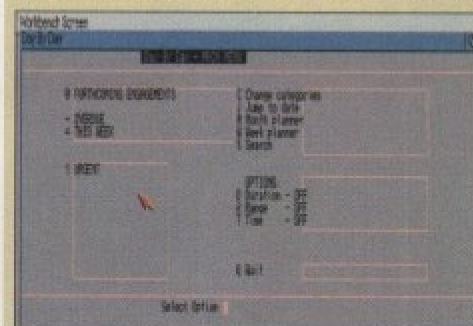
Digita Home Office

This old chestnut is composed of four programs: Home Accounts, Mailshot Plus, DG Calc and Day by Day, and costs roughly half as much as the other two packages.

Digita's package is the only one to include something resembling a diary/personal organiser, something that might have given it the edge over the other titles. Sadly, I'd much rather stick with writing memos to myself because this system is drab in appearance and amateurishly implemented.

Mailshot Plus is a handy little program for printing out labels for envelopes with the minimum of fuss, and naturally it allows for mailmerge with Wordworth. Our copy, however, was significantly bugged.

The Home Accounts manager is the predecessor to the recently reviewed Money Matters, so it's all about keeping your personal finances in order. It doesn't have the latest version's pretty icons but it will keep track of all those standing orders for you. After working



This program is supposed to remind you of important dates and appointments, but it's so drab I couldn't be bothered to look at it

with Maxiplan, the spreadsheet program in this package leaves a lot to be desired for the professional, and it's no surprise to find it lacks the power of that benchmark title.

Nevertheless, it's not quite so limited as it looks thanks to the availability of 52 formulae, a 'Goto cell' feature, password and cell locking facilities. There's also a feature allowing any row or column to be held on screen as the spreadsheet scrolls beneath.

Overall, the package feels outdated, hit and miss and unstable on the A1200 we used. It is cheap and better targeted for household finances/records than the other products reviewed, so it may be worth considering. Before spending any money I'd see what alternatives were available in the PD libraries first.

The bottom line

Product: Digita Home Office
Price: £35
Supplier: Digita International
Tel: 01395 270273

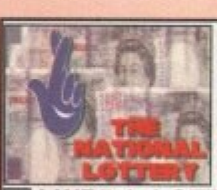
Ease of use	**8**
Implementation	**5**
Value for money	**6**
Overall	**6**


EPIC
SOFTWARE
Access
VISA
MasterCard
Order Hotline:
01793 490988
Fax Order Line:
01793 514187
ORDERING BY POST
Simply send us your order, listing the items you require, the total cost and yor name and address with payment either by cheque or postal order made payable to EPIC MARKETING. Most orders are despatched with 48hours.
ORDERING OVER THE PHONE
Call any time between 9:30am - 3:30pm Mon-Sat with your credit card details and a list of the items you would like to order.
COLLECTING YOUR ORDER
You are welcome to collect you order any time between 10am and 5:30pm Monday - Saturday.
OVERSEAS ORDERS
Overseas orders are welcome, but there is a minimum order of 3 titles and please add £1 P&P per floppy title and £2.00 per CD-ROM title for Postage & Packing.
POSTAGE & PACKING
UK & Mainland add a total of just 50p for floppy software.
Plus £1 per CD-ROM title ordered.
INFORMATION
Goods are not sold on a trial basis. E&OE.
PLEASE STATE YOU ARE OVER 18 WHEN ORDERING ANY ADULT TITLES.
Full Terms and Conditions available on request.
We do not condone the use of pornographic software.
Actual screenshots may vary between different computer versions.
A computer virus!
I'm gonna eat yer FAT!
A two disk collection of the best virus killers available for the Amiga. An essential purchase for any Amiga user. Very easy to use. Only £4.00
VIP4-2. VIRUS KILLER SET
Workbench 3 is very good but commodore forgot to include a few things, like a virus killer, a decent file manager, a menu system, a few WB games & more. £7
SCF7-3. STUFF COMMODORE FORGOT
StarTrek Action/Strategy game. You take control of all key personnel on the bridge. great sound fx and graphics make this a superb game. £6.00
STG6-3. STARTREK GAMES
Now the wheather is nice, it`s time to do the garden, and the best way to get out of doing it is to spend loads of time designing it. Only £3.00
GRN3-1. 3D GARDEN DESIGNER
Make your own hardware and save £££. Sound samplers, memory expansions, Bridgeboards etc. Knowledge of LHA req. Only £4.00
HWP4-2. HARDWARE PROJECTS 2
Over 40 top quality compugraphic fonts for use on Workbench, PageStream, DPaint4, Wordworth2&3 etc. A great value set of fonts. All for only £7
PSF7-3. COMPUGRAPHIC FONTS
A huge set of classic board games, Includes: Monopoly, Scrabble, Cluedo, Mastermind, Othello, Backgammon, and more. Great fun for all the family. Only £10
BDG10-4. CLASSIC BOARD GAMES
X-COPY
Xcopy TNG is the most powerful Amiga disk copier available, Includes software and an external disk interface for better results. Only £29.99
SXCP30-1. XCOPY TNG
EPIC Computers
Simple to use, but competent colour Desk top publishing software for any Amiga.
Program Only £4.00
NRL4-1. NEWS MAKER
Over 500 game cheatson 2 disks for Amiga games. Most of the latest games cheats included. All for only £5.00
CHT5-2. CHEATS GALORE 2
Thousands of General Knowlege questions and answers on this two disk Quiz Pack. Great fun for all the Family. Only £5.00
QUZ5-2. QUIZ CHALLENGE
A set of 10 of the best puzzle games for the Amiga. Frustration at an extreme. Superb value. Only £7.00
MTG7-3. MIND TEASERS
A complete wordprocessing package. Features all standard options like: cut, paste, spell checker etc. An overall easy to use package. Only £3.00
TXE3-1. TEXT ENGINE WP
Create your own fascinating 3D stereogram pictures on your Amiga. Complete with demo pictures, viewer and Magic Eye maker. Only £5.00
RDS5-2. MAGIC EYE KIT
Get your finances in order with this excellent package. Keep track of your fuel, petrol, & food bills. Find out where all your money geos each month. Only £7.00
FIN7-3. FINANCE PACK
A two disk set of new workbencgh backdrops and icons for use with Magic Workbench, on any Kickstart 2 or 3. MagicWB available. £3 MagicWB extra`s.... £5
MWE5-2. MAGIC WB EXTRA`S
The most powerful word search, crossword solver available on the amiga. Includes a dictionary of over 58,000 words and you can add your own. Only £5.00
WFP5-2. WORD FINDER Pro
If your new to the Amiga then you may be having problems with missing libraries etc on your workbench that are needed for certain titles to run. This disk contains all popular libraries, veiwers and other popular tools. Only £2.00
EFB2-1. ESSENTIAL FOR BEGINNERS
A selection of tools for degrading your A1200 or A4000 to allow you to run most of the older Amiga games, tools, and demo`s. Only £4.00
DEG4-2. A1200 DEGRADERS
Includes print manager, lable printer, address keeper, printer drivers, loads of other printer tools. Knowledge of LHA required for use. Only £7.00
PRT7-4. PRINTER TOOLS 2
If your a budding Ian Beale or Floyd, then this Gourmet cookbook will get you going. Only £3.00
GCB3-1. COMPUTERISED COOKBOOK
Over 130 clipart images on 3 disks of all the Lion King characters: for use in any Amiga package. Only £6.00
LKA6-3. LIONKING CLIPART
Typing Tutor
If you want to learn to type like a pro. then our superb Typing tutor set will help you on your way. Only £3.00
TYP3-1. TYPING TUTOR
If you want to linkup your Amiga to a PC or another Amiga then this is the software for you. You can easily transfer files from one machine to another. Only £8.00
COM8-3. NETWORKING SET
An essential purchase for any hard drive owners, Includes backup tools, virus tools, disk repairer, and loads of other utilities. Only £5.00
HDT5-2. HARD DISK TOOLS
Over 100 games on 5 great disks. All the classics are here, aswell as loads of new original games. Hours of fun for just £10.00
GG10-4. 100 GREAT GAMES
A two disk collection of Workbench 3 backdrops. Very easy to use. Works with Hard disk of Floppy disk. Grown up`s only.... Only £5.00
WGB5-2. WORKBENCH3 BACKDROPS
Word Processing
Database
Spreadsheet
Diary
The complete small office suite, Includes Wordprocessor, Database, Speadsheet, and Diary. Compatible on all Amiga`s. Only £7.00
IFC7-3. LITTLE OFFICE
FANTASTIC FONTS ABCDEFG 1234567
Fifty of the best Bitmap fonts available. This pack also includes a powerful font editor. Compatible with Workbench, D Paint, etc. £7.00
FNT7-3. FIFTY FANTASTIC FONTS
A ten disk collection of very high quality cmono clipart, suitable for all Amiga DTP & Paint packages. All popular subjects included. All ten disks only £13
GFX13-10. PRO. CLIPART
CANON SEIKOSHA PANASONIC NEC HP COMMODORE STAR TEXAS
This is the most upto date and comprehensive collection of printer drivers available for the Amiga. Star, Citizen, Panasonic, HP etc, etc Easy to Install. £3.00
DRV3-1. PRINTER DRIVERS
EPIC PRESENTS AMIGA SOFTWARE SPECIAL (C) 1995 EPIC TV
Six disks of Video fonts, Backdrops, Titlers, Video wipes, and loads more. Graet for producing your own video`s.
All for only £12.00
VID12-6. VIDEO TITLING TOOLS
Amiga Beginners Guide
If you`ve just purchased your Amiga your you may be a bit boggled how to use it properly, Well this five disk set takes you step by step through every basic thing to know. All five disks for just £9.00
ABG9-5. BEGINNERS GUIDE
EPIC MARKETING, FIRST FLOOR OFFICES, 138 -139 VICTORIA ROAD, SWINDON, WILTS, SN1 3BU. UK



A collection of Amiga card games including: Poker, Craps, Solitaire, Pontoon, Blackjack,Montana, Rummy and more. Only £10.00

☐ CRD10-4. CLASSIC CARD GAMES



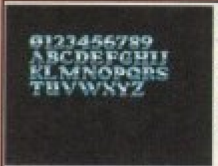
Lottery Winner Professional attempts to predict the results of the Lottery. Every week you input the previous weeks numbers into a database. Only £5.00

☐ LWP5-1. LOTTERY WINNER



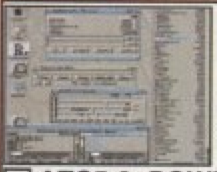
Magic User Interface will compliment Magic Workbench to enhance your Workbench even more. *Knowledge of Shell is required.* Only £4.00

☐ MUI4-2. MAGIC USER INTERFACE



A set of over 50 superb professional looking colour clip fonts. Perfect for Video titling, Demo making or Desk top publishing. Great value at £5.00

☐ CCF5-2. COLOUR CLIP FONTS 3



New collection of tools for WB2 & 3. Includes HD tools, Virus killer, sound & graphics tools, text editor and loads more. A bargain at £5.00

☐ ATC5-2. POWER TOOLS



Another great puzzle game, this ones for the Adults. great fun. Only £5.00

☐ CFS5-1. CENTREFOLD SQ.



Retrieves lost or damaged files. Undelete deleted files. Repair, Salvage or Validate almost any Amiga dos disk. Including Hard drives. Only £5.00

☐ DRT5-2. RECOVERY TOOLS



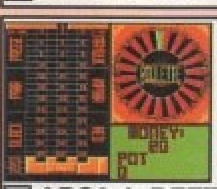
This pack includes C64, GAMEBOY, BBC, VIC20, IBM, SPECTRUM SINCLAIR QL & ATARI ST emulators Only £5.00

☐ AEP5-3. EVERY EMULATOR



A range of clipart for use with Page Setter, Dozens of subjects including : People, Animals, Vehicals, Sports etc. Only £3.00

☐ MPC3-1. PAGESETTER ART



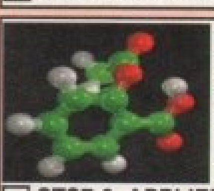
Amiga Betting Shop. If you like a little flutter now and then, then your love this set of 4 great gambling games. Fruit machine, roulette etc. Only £6.00

☐ ABS6-4. BETTING SHOP



Girls and more girls, loads of 256 colour girly pictures, for use on the A1200 only. All 3 disks only £6

☐ GRL6-3. GIRLS,GIRLS,GIRLS.



Includes:GRAVITY SIM
ELEMENTS TABLE
UNITS CONVERTER
GEO TIME
CLOUD CREATOR
EVOLUTION MODEL
3 disks for only £7.00

☐ STS7-3. APPLIENCE OF SCIENCE



NEW VERSION.... Test your drive, memory, Keyboard, GFX chips, sound ships, speed etc. Only £3.00

☐ ENK3-1. ENGINEERS KIT



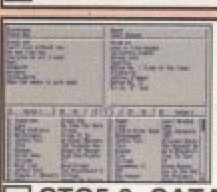
Play Poker with some of the most lovely women in the world. Includes superb graphics and digitised speech. Over 18 only Only £10.00

☐ DSP10-1.DELUXE STRIP POKER



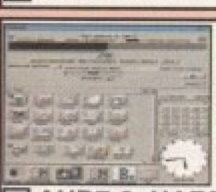
With this language tutor you could learn to speak in any of the following languages. SPANISH,FRENCH GERMAN,ITALIAN & JAPANESE. only £8.00

☐ LTP8-4. LANGUAGE TUTOR



Organise your Record, CD, Video and disk collection with this superb set of cataloging tools. Only £5.00

☐ CTG5-3. CATALOGUER`S



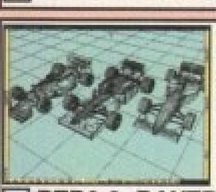
If you`ve just got a new Hard drive for your A1200 then this set of disks are essential. Prep and Partition your drive then install WB 3 100% properly. £7.00

☐ AHD7-2. HARD DISK SETUP



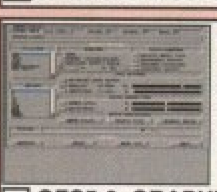
A new five disk set of high quality colour clipart, All the major subjects included. OKAY on any Amiga package. Only £9.00

☐ CCP9-5. COLOUR CLIPART



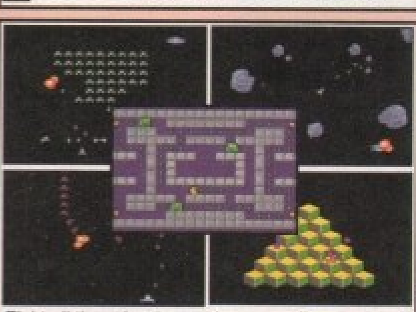
Imagine objects of MACLAREN, WILLIAMS and BENETTON Formula One motor racing cars. (4mb recommended) Only £6.00

☐ RTR6-3. RAYTRACED RACERS



The complete graphics manipulation and converter set. supports GIF, IFF, BMP, PCX etc, etc. Only £5.00

☐ GFC5-2. GRAPHICS CONVERTER



Eight all time classic arcade games, Pacman, Frogger, Asteriods, Space Invaders, Centipede, Missile command, Q-Bert, & Omega race. Great value for money. Only £5.00

☐ ARC5-2. ARCADE CLASSICS2



Whether your a complete beginner at chess or a champion. JI Chess has something for you. Superb graphics and speech. Only £5.00

☐ JIT5-2. CHESS & TUTOR



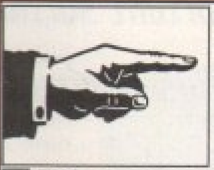
Includes Lightwave scenes & objects of the Delta fighter, Soul Hunter, two Vorlon space craft, B5 Station, two Jumpgates & nebular space dust. £7.00

☐ BF07-4. BABYLON 5



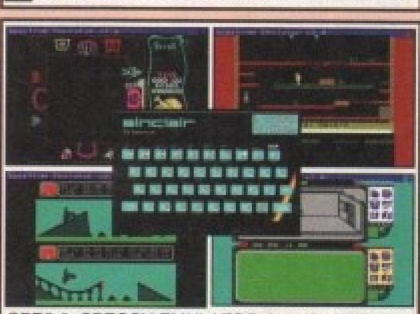
Password & file encryption tools. Put a password on your computer or make any file unreadable to anyone else. Not for the complete beginner. £10.00

☐ PSW10-4. PASSWORD SET



Over 50 superb quality Eye catcher clipart images for use in any Amiga package. Only £4.00

☐ EYC4-2. EYE CATCHER CLIPART



SPE5-3. SPECCY EMULATOR & 50 GAMES £5
SPG15-7. 100 CLASSIC SPECCY GAMES £15
SPG35-33. 400+ SPECCY GAMES + EM. £35
CDSPS3. SPECCY SENSATION CDROM £20

☐ SPECTRUM STUFF

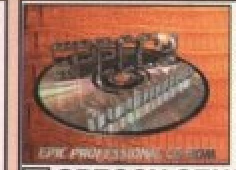
AMIGA CDROM TITLES

*TITLE MAY NOT BE AVAILABLE AT TIME OF GOING TO PRESS



Over 600mb of Imagine & lightwave objects, textures, Animations, Picture files, Postscript fonts, Colour fonts, etc. Only **£19.99**

☐ GFX SENSATION Vol.1



Includes over 500 all time classic spectrum games on one CD for CD32, CDTV, Zappo etc. Includes actual Speccy emulator aswell. Only **£14.99**

☐ SPECCY SENSATION CD



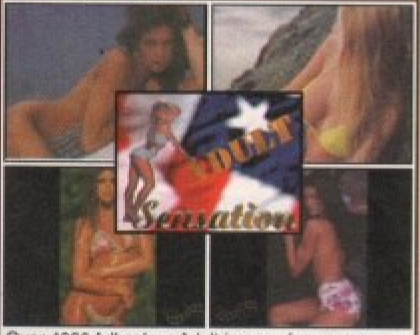
All 21 volumes of the Encyclopedia on one CD. Includes over 2000 life like pictures and sound files. *Why fill a shelf when you can fill your mind?* Only £29.99

☐ GROLIER ENCYCLOPEDIA



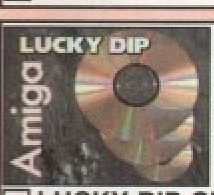
Every arcade classic you could think of. Invaders, Pacman, Asteroids, Frogger, Q-bert, Missile command, Tempest, Centerpede and loads more. **£9.99**

☐ *ARCADE CLASSICS CD



Over 4000 full colour Adult images for use on your Amiga or PC. OVER 18 Only **£19.99**

☐ ADULT SENSATION CD



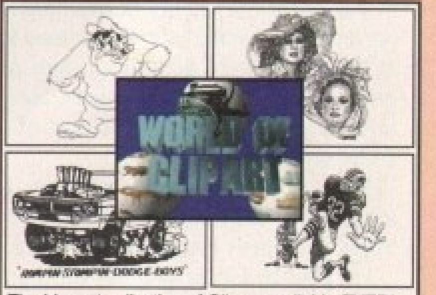
Lucky dip volume one contains a varied range of games, demos, clipart, tools, samples, modules etc. **£5.00**

☐ LUCKY DIP CD Volume One



All the best and most useful tools for your Amiga. Includes Hundreds of essential utilities Just **£9.99**

☐ *ESSENTIAL UTILITIES Vol.1



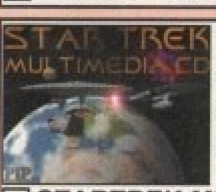
The biggest collection of Clipart available EVER! Colour + B&W IFF, EPS, Pagestream, GIF, PCX, BMP, TIF, Pagesetter, WMF. Over 60 catagories. DOUBLE CDROM. A bargain at just **£17.99**

☐ WORLD OF CLIPART CD



The latest release from the Aminet series. contains, hundreds of tools, demos, objects etc. Now only **£14.99**

☐ AMINET 5 March/April `95



NEW!!! The Startrek Multimedia CD. contains: Animations, Sound samples and hundreds of pictures Only **£27.99**

☐ STARTREK MULTIMEDIA CD

EPIC MARKETING, FIRST FLOOR OFFICES, 138 -139 VICTORIA ROAD, SWINDON, WILTS, SN1 3BU.

I can see the

Paul Austin oversees the refit of the most important software update of 1995, in an exclusive preview of Lightwave Version 4

With the impending launch of Lightwave V4 on the PC, Alpha, SGI and of course the Amiga, the interest, hype and misinformation surrounding this latest revision to the ultimate in desktop rendering has already reached fever pitch.

As the first magazine to actually use the software, *Amiga Computing* plans to bring you a two-part insider guide to the latest updates, starting with a close inspection of the additions to layout.

Although still in Beta test, this latest revision already promises much more than simply cross compatibility. Unlike its predecessor, version 4 is by no means a simple face lift from a previous incarnation. In fact, even in its present form it promises, and indeed delivers the most important change since the program's initial launch as a standalone PAL compatible.

At first glance there seems little change from version 3.5, but look a little closer and you soon discover a whole host of new and improved features lurking behind a seemingly insignificant collection of new buttons and envelopes.

To kick things off we'll start with a stroll along the control panels. First up is the Scene section, which ironically only offers one major change – however it's still pretty dramatic.

As you can see, the panel now offers a frames per second setting – in addition to an end-beeb option. Obviously, an FPS setting will make designing for a whole range of applications other than just video much more straightforward. However, there's an even more important underlying change. In the past, Lightwave calculated all its animation in meters per second. Now that's changed, with the introduction of FPS as the default measuring system for textural animation.



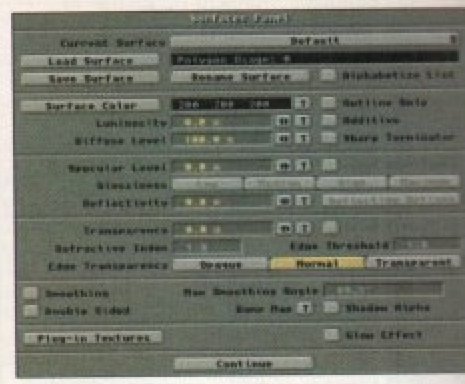
A small change that makes a very big difference to how Lightwave handles its textural animation

Surface special

There are major changes across the board here, the first being a much improved reflection map option which includes Backdrop only, Spherical map, ray traced & backdrop, and finally ray tracing & Spherical. As you've probably guessed, the latter two offer a new and much more flexible method of adding realism to object reflections within a scene.

Yet another new addition is an Alpha shadow option. This provides an easy method of adding shadow from objects to real-world elements within projection mapped scenes – 'dancing on the desk effects' with added panache.

Next-up come more plug-in options, this time the spotlight falling on plug-in textures. As you may already know,



More plug-ins, the excellent new reflection features plus the glorious glow button

Steve Worley – the creator of the essence procedural texture collection for Imagine – is already hard at work porting essence

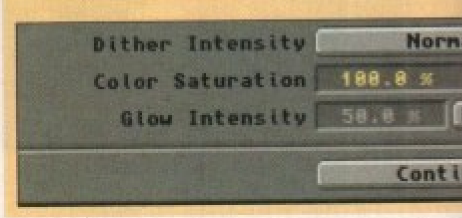
Camera

Like the images section, camera control hasn't really seen too many changes. In fact the only obvious addition is numerical input for aspect ratios. For the average videographer this isn't exactly earth shattering, but for anyone looking to work in film, or print, it is something of a godsend.

Very special effects

Although most of the control panels have undergone a minor reshuffle to accommodate the new features, none have altered dramatically – except the Effects/composition panel. This highly undervalued aspect of Lightwave has seen a dramatic change with an all-new layout providing a much clearer indication of exactly of what's on offer. Better still, there are plans for image processing plug-ins – which rumour has it will include a complete plug-in ImageFX module.

Aside from the physical change to the composition panel, it also holds some new features including foreground dissolve with envelope, plus a new high/low

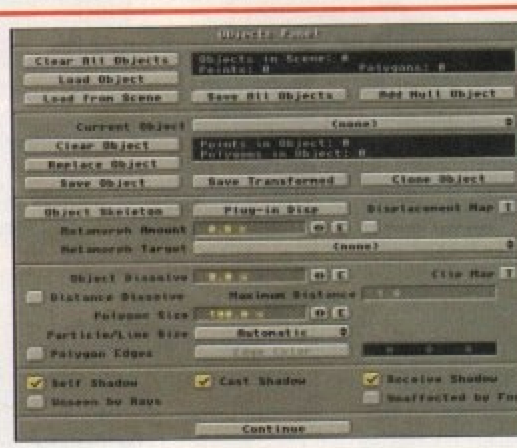


Object options

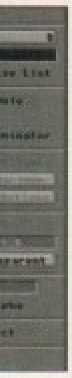
In this panel the variety of new features really start to show. It's here where the first plug-in, entitled Plug-in Disp appears, which in this case offers access for third-party developers to produce add-on displacement programs, automated object manipulation and deformation systems, and of course particle animation software.

Next-up comes Unseen-by-rays. This again is another major innovation, allowing selected objects to be rendered as non-traced elements even though they're part of a ray traced scene.

Unseen-by-fog is another newcomer. It does exactly as the title suggests, thereby allowing certain objects, backdrops and projection-mapped elements to play an uninhibited part in scenes which use the fog effect.



The first of the all-important plug-ins, plus the excellent time saving addition of Unseen by rays



over as a Lightwave plug-in. Unfortunately, they won't ship as a standard feature of Lightwave V4.

The final newcomer in the Surfaces section is the long-awaited Glow Effect. Courtesy of glow you can add a user-definable aura or incandescence around any surface – no need anymore to slap lens flares everywhere if you need to fake some radiosity within a scene. Better still, Glow offers a means of easily generating some very tricky effects, such as realistic lasers, neon lighting and so on.

However be warned – adding glow does increase rendering times quite dramatically, as a separate image processing pass is required during render to generate the effect.

sence
gine –
sence



A spectacular object by Kevin Stenning proves there's more to Lightwave than amazing animation

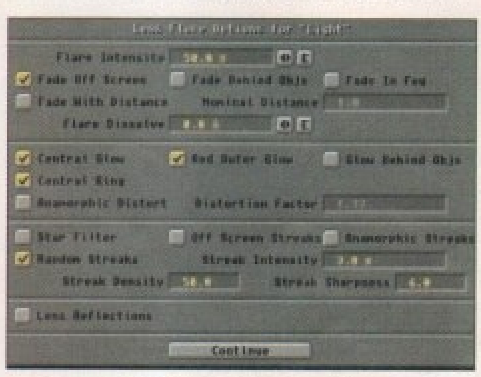
light

let there be...

At the top of the Lights panel sits another newbie to the Lightwave repertoire, namely Global Flare Int. Basically, this provides a means of ramping all the lens flares in a scene up or down automatically. The feature was specifically requested by makers of SeaQuest DSV to provide an easier method of controlling lens flares during power out/power ups and explosion sequences.

Lens flares are another area that's seen some major attention, with one of the biggest changes being the ability to user define Anamorphic distortion. Unfortunately, this can't be enveloped at present, but even as it stands it's pretty useful for generating the Star Trek TNG warp effect and other spatial anomalies.

Add to that user-definable streak settings, which include the ability to set streak, intensity, density and sharpness, and you have a fairly comprehensive editing environment for all manner of flare effects.



Much improved user control over lens flare has to be the highlight of a seemingly unchanged lights panel

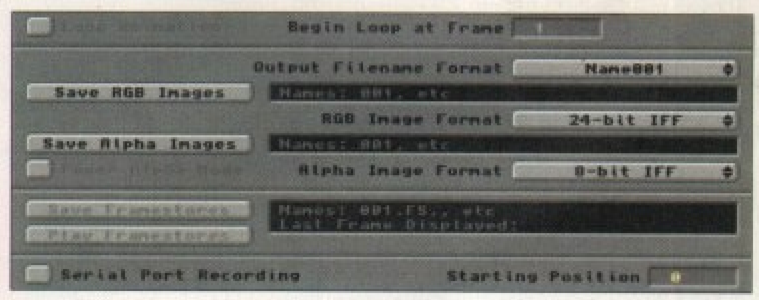
> Seamless kinematic movement in a matter of minutes – impressive, no matter which way you look at it

On the record

Perhaps the most notable change in this section has to be the option for user-definable file naming conventions. According to NewTek this has been added to make Lightwave files more compatible with the filename requirements of other packages. I think it's been added to make life a little easier for the PC.

The only other new arrival is a rather mysterious Fader Alpha button, which without the aid of a manual remains something of a mystery. Best guess is that it's another add-on for improved keying during image composition.

Another notable change is improved support for third-party graphics cards. However, during testing I didn't notice any dramatic change with regards to the Picasso – although the interface was marginally faster when running a 800x600 display. Unfortunately, the preview option flatly refused to play back either wireframe or bounding box anims. Obviously with a Beta some bugs are to be expected and hopefully this one will be put to the sword prior to release.

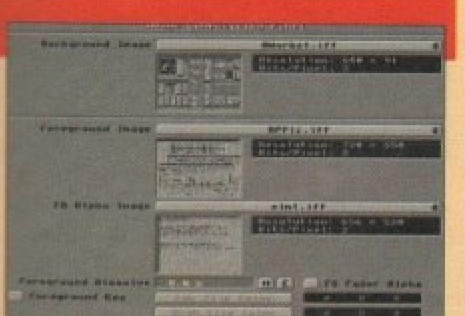


No major changes, apart from a fresh approach to file names

cts

anels
ffle to
none
pt the
highly
e has
ll-new
ndica-
Better
ocess-
it will
geFX

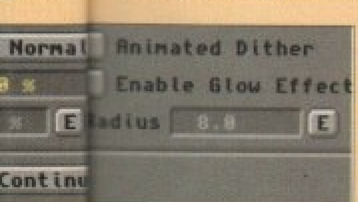
to the
some
d dis-
gh/low



A new look for an old interface, with new fader options and improved colour controls

colour feature for keying operations.

The only remaining element is the control system for the aforementioned Glow Effect. As you can see from the screen shot, configuring the new feature isn't exactly a tricky business.



The real surprises await in composition. However, there is a completely new section dedicated entirely to glow control

Images as before

The image section is unique, because it's the only section not to boast any major changes – assuming you don't have access to a Flyer that is.

Not surprisingly, support for Flyer Clips has been added to the sequential image section. However, there's no direct support for the PAR, or any other third-party DV system. Plug-ins may appear later.

ScreamerNet

Unfortunately, power users aren't likely to be overjoyed when it comes to Network rendering. As it stands there appears to be no change to the basic ScreamerNet set-up.

One of the biggest disappointments of ScreamerNet in Lightwave 3.5 was the lack of batch rendering. Alas that's still the case. Lets hope the profusion of plug-ins will offer support for some sort of batch rendering add-on, but like all plug-ins it will undoubtedly mean additional expense.

Inverse Kinetics

At first glance, life on the main layout screen seems almost identical to its predecessor. In fact the only obvious difference is the change from XY, XZ and ZY view buttons to a far more comprehensible Front, Top and Side selection.

However, look a little closer and you'll notice what has to be the most important new arrival in the entire package, namely the mysterious Goal button. Believe it or not, this insignificant little gadget is the key to Inverse Kinematics. It's new, it's cool, and best of all it's really easy!

It's obvious that the arrival of features like bones, child bone and auto Key adjust in 3.5 was no accident. When these features – especially the bone options – are blended with the new found kinematic skills you arrive at spectacular end results. Unlike many 3D systems, kinematics in Lightwave is a dream to use and incredibly simple to set up. In the screen shot we've used bones to illustrate the technique, but you can use objects in exactly the same way.

Firstly you add the basic elements – which in this simple example was just two null objects. Then the four bones were added to the first null object – that's where child bone option comes into its own. Next the bones were parented four to three, three to two and two to one, and finally bone four was told to treat the null object number two as its goal.

From then on it's playtime! You simply grab the second null object and move it around – at which point all the bones bend in classic kinematic style as they attempt to track the goal. I told you it was easy! When you've arrived at a pose you like, a simple 'key all items' command makes it permanent. If you wish you can still move and edit the components in the kinematic chain without affecting their counterparts, or the basic kinematic relationship.


A painfully simple example of Lightwave kinematics. But then again, that's the whole point! It's really, really, easy

All things considered it is a near perfect solution. The only element missing is the ability to limit the movement, or angle of rotation for the various elements in the chain. For example, a forearm would happily revolve at the elbow and go straight through the upper arm and back out the other side. NewTek have admitted that kinematics still requires development, and are already working on the 'wish list' for the next revision.

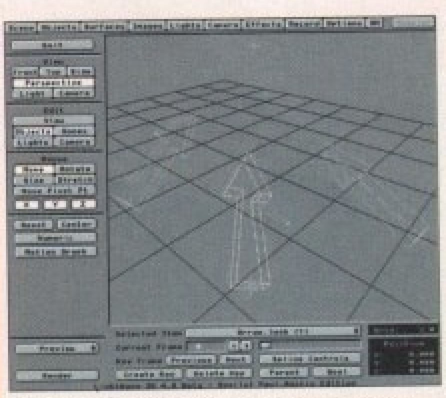
However, even with this minor inconvenience the overall implementation is excellent. For example, if we replaced null object one with a finger object, it would bend and flex just like the real thing. Thanks to the bones the object would also deform properly – given the necessary polygons. Seamless kinematic movement in a matter of minutes – impressive, no matter which way you look at it.

Added bonus

Although not immediately obvious, kinematics also provides a solution for another missing link in the Lightwave chain. In previous revisions it was impossible to target one object to another. However, thanks to Inverse Kinematics we finally have a solution. Because objects/bones don't need to be physically linked to each other, or the goal they're tracking, making one object 'watch and follow' another is really easy.

All you need is a parent, the tracking object and a target or goal object. You then parent the tracker and tell it to use the target object as its goal. Better still, you can target the goal object with as many trackers as you want, so, you could have every head in a tennis crowd follow the ball, or every gun on a ship track the incoming attacker.

Although this may not sound particularly revolutionary, it's a feature that many pro animators have been longing for. In fact, for many this will been just as important as full kinematics.


A simple example of kinematic tracking, as the arrows effortlessly follow the target around the scene



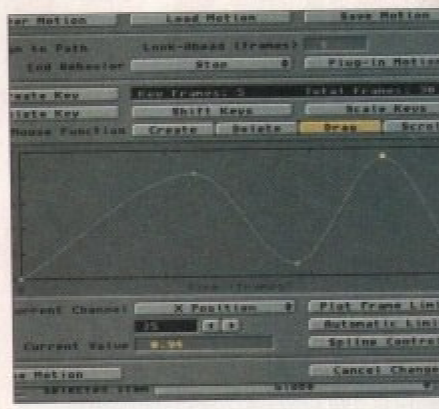
The all-new colpur feature in action. Could this be the first of many image processing options to plug directly into the Lightwave interface?

Plug-in motion

As already mentioned, plug-ins are going to play a big part in the future development of Lightwave. Nowhere will this be more apparent than within the move requester, which like its control panel counterparts has its own plug-in option.

From here you can expect the likes of WaveMaker, Dynamic Motion Module, Power Macros and Impact to make their mark with all manner of motion specific addons. According to NewTeks' Brad Pebbler, a number of projects are well under construction, including a new module from the creators of Sparks which employs particle animation to generate realistic fur effects and other organic forms. Even NewTek are getting in on the third-party act by enlisting the help of Elastic Reality – formerly known as ASDG. As a result, NewTek will license the rights to include over 20 ADPro-style loaders and savers within Lightwave V4.

Although not active in the Beta version NewTek have already guaranteed that al the aforementioned loaders and savers wi be a standard element, and will cater for a the major image formats, across al platforms.


Looks familiar, but when the plug-ins arrive motion control will probably be one of the biggest benefactors

And finally

Obviously, with the software still effectively 'under construction' there's still th odd feature which isn't exactly firing on all cylinders. However, even as it stands the new Lightwave has the makings of a truly spectacular product. Almost all th wish list elements have been included, in addition to a host of new features tha quite literally put Lightwave on a par with the best that Wavefront, Alias an SoftImage can offer. And all at a tiny fraction of their asking price.

Internally there's also very little to complain about. Lightwave 3.5 scenes, object and textures all appear to work faultlessly with the latest version. And better sti there appears to be no problem in porting Lightwave 4 files between formats.

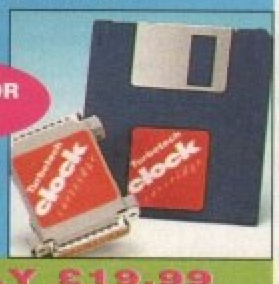
Basically that's all that space will allow for this month. Next month we'll take close look at the changes to modeller. However, if all goes well, we hope to brir you the first full review of the complete package, plus another very speci Lightwave exclusive. Stay tuned...

CLOCK CARTRIDGE

SAVE £5 WHEN YOU BUY BOTH

Our unique and highly rated external clock cartridge will enable your Amiga to continually store the correct time and date in its own battery backed memory. Simply plugs onto the back of the Amiga and does not invalidate the warranty. Compatible with ALL Amigas.

IDEAL FOR A1200

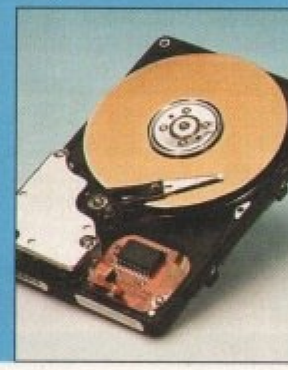


ONLY £19.99
(Plus £1.00 postage and packing).

HARD DRIVES

Our high speed 2.5' IDE hard drives for the A1200 & A600 computers come complete with fitting cable, screws, partitioning software, full instructions and 12 months guarantee. The drives supplied by us are tested, formatted, partitioned and have Workbench installed for immediate use. Fitting is incredibly simple; if you can plug the mouse into the mouse socket, you will be able to plug the hard drive into the hard drive socket!
Free while-you-wait fitting for personal callers.

20mb	£ 89.99	210mb	£194.99
40mb	£ 99.99	258mb	£204.99
85mb	£109.99	344mb	£249.99
120mb	£134.99	405mb	£299.99
170mb	£179.99	540mb	£449.99



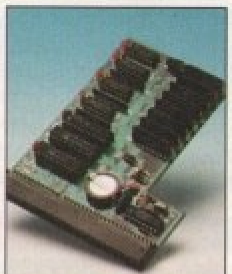
FREE
"HOW TO FIT YOUR HARD DRIVE" video and Stakker disk to increase the drives capacity with every hard drive purchased.

MEMORY EXPANSIONS

A1200 32 bit FASTRAM memory expansions feature a battery backed clock and an accelerator FPU socket. Easy trapdoor installation.

2mb	£129.99	33mhz 68882 FPU	£59.99
4mb	£178.99	40mhz 68882 FPU	£79.99
8mb	£319.99		

NEARLY DOUBLES THE SPEED OF THE A1200



A600 memory expansions
1mb without clock £34.99
1mb with clock £39.99

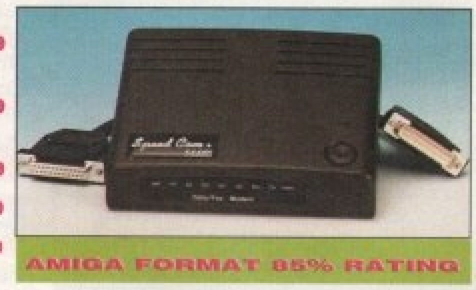
SAVE £10.00
if you purchase an FPU at the same time as a memory expansion.

Excite your Amiga

SPEEDCOM Modems

Our highly rated, top quality, feature packed modems are probably the best modems available for use with the Amiga. All modems include our **FREE MODEM ACCESSORIES PACK (worth £19.99)** which includes a cable to connect the modem to the Amiga, NCOMM3 comms software and an Amiga Guide to Comms. Features:- MNP 2-4 error correction MNP 5 data compression, Fax class 1&2, Group 3. Hayes compatible, 80 page manual, 12 month warranty. **GP FAX Software £39.99 TERMITE £39.99**

SPEEDCOM+B (14,400 V32bis)	£119.99
SPEEDCOM+ET (19,200 V32Terbo)	£149.99
SPEEDCOM+BF (28,000 V34 & VFC)	£199.99
XLINK 14,400 BT appro	£134.99
XLINK 28,800 BT appro	£224.99



AMIGA FORMAT 85% RATING

NEW RANGE
APOLLO
POWER HARD DRIVES & ACCELERATORS

APOLLO A1230 Accelerators
1230 TURBO

Turbo 50 version includes 68030 CPU+MMU 50mhz Turbo 28 version includes 68030 CPU+MMU+FPU 28mhz. Up to 64mb of Autoconfiguring Fastram 72mb/sec data transfer rate SCS12 controller built in with transfer rates up to 3.5mb/sec. Real time battery backed clock. 2 SIMM sockets for 72pin simms. 1, 2, 4, 8, 16 or 32mb simms. Turbo 50 light includes 50mhz 68030, FPU socket, 1Simm socket and connector for optional SCS12 adaptor.



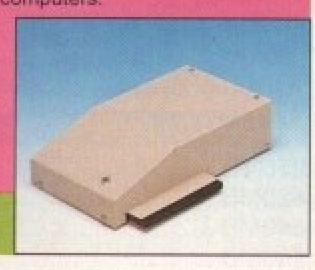
A1230 Turbo 50 light	£199.99
A1230 Turbo 50	£269.99
A1230 Turbo 28	£189.99
4mb SIMM	£139.99
8mb SIMM	£289.99

50 MHZ 68030 FROM £199.99

APOLLO A500/1500 HARD DRIVES

IDE interface for Amiga A500/A500+ and A1500 computers. Easy to fit. Uses standard 3.5' IDE hard drive.

Interface only	£79.99
Interface with 100mb hard drive	£189.99
Interface with 365mb hard drive	£229.99
Phone for other sizes.	
A1500 IDE/SCSI/RAM card	£129.99

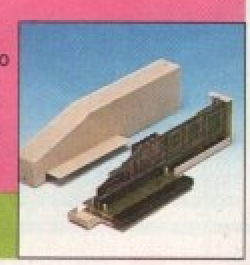


NEW RANGE

A500/A500+ & A1500 ACCELERATORS

68020 processor complete with 68881 co processor running at 28mhz speeds up your A500 by ten times! Up to 4mb of RAM can be added. Plugs onto the expansion connector and has a through connector for other peripherals. Can also be attached inside the Apollo A500 hard drive interface.

A500 Accelerator	£149.99
A1500 68030+68882 25mhz+SCSI	£349.99
A1500 68030+68882 50mhz+SCSI	£499.99



NEW RANGE

ALSO AVAILABLE

3.5' HARD DRIVE FITTING KIT (A1200)	£17.50
A600/A1200 CD ROM drive (POWER)	£191.99
INTERNAL REPLACEMENT FLOPPY DRIVE	£44.99
EXTERNAL 3.5' FLOPPY DRIVE	£54.99
GOLIATH HIGH OUTPUT POWER SUPPLY	£44.99

siren

No.1 for mail order
SALES HOT-LINE
FREEPHONE
0500 340548
ENQUIRIES: **0161-796 527**
FAX: **0161-796 3208**

No.1 for Amiga in Manchester

Order **NOW** for immediate despatc
FREEPHONE
0500 340548
(for credit card sales only)
0161-796 5279 for enquiri
or fax **0161-796 3208**

Open **9am to 6pm Monday** to **Friday. Saturday** mornings **9am to 12pm.**

Access, Visa & Switch accepted.
Send cheques (made payable to Siren Software), Postal Orders or credit card details to :-
Siren Software, 178 Bury New Road, Whitefield, Manchester, M45 6AF England

Personal callers welcome. Please phone first to check availability of any item.

Directions
From M62 junction 17, head toward Bury. We are 50 yards on the right after the third set of traffic lights, opposite Masons pub.

All prices include VAT. postage and packing will be charged at £3.50 per order (U.K.), £7.50 Europe and £12.50 rest of the World.

We have now moved! Come and visit us at our new showrooms

Visage Computers

(Dept AC)
27 Watnall Road
Hucknall
Nottingham
NG15 7LD

If you have found a cheaper price elsewhere in this magazine, call us and we will do our best to beat it.

To Order Telephone:
(0115) 944 4501

AMIGA PD

PARTY '94 DEMOS

1 Andromeda - Nexus7 AGA
2 Bomb - Motion Origin2 AGA (2)
3 Sanity - Roots AGA
4 Polka Bros - Twisted AGA 4mb (4)
5 Silents - Soul Kitchen AGA (2)
6 Rebels-Whammer Slammer AGA(3)
7 Melon - Ninja AGA
8 Oxyron - Killing Time AGA (4)
9 Dig Dreams-Eternal MadnessAGA(2)
10 40k Intros

We also stock:- Utilities, Fish 1-1000, Assassins 1-220, F1 Licenseware 1-44, and are now the sole distributor for LSD Legal Tools from #152 onwards. The LSD Legal Tools cost £1.25 per disk.

DISK PRICES & POSTAL RATES

DISKS	PRICE PER DISK	P&P
1-10	£1.00	£1.00
11-25	£0.95	£1.25
26+	£0.90	£1.50

AMIGA HARDWARE

HARD DRIVES

WESTERN DIGITAL

3.5" IDE

210MB.........12ms...........£159.99
340MB.........12ms...........£169.99
420MB.........12ms...........£179.99
540MB.........12ms...........£229.99
850MB 10ms NEW! LOW PRICE ..£269.99
1 GIG 10ms PRICE CRASH!!! ...£349.99

QUANTUM

3.5" IDE

270MB.........12ms...........£139.99
420MB.........12ms...........£159.99
540MB.........12ms...........£189.99
730MB.........10ms...........£239.99
1-GIG ....10ms...........£499.99

3.5" SCSI 2

270MB.........12ms...........£199.99
540MB.........12ms...........£239.99
1-GIG ....10ms...........£549.99
2.1-GIG ....10ms...........£999.99

IBM

2.5" IDE

80MB.........16ms...........£109.99
130MB.........16ms...........£129.99
170MB.........16ms...........£159.99
340MB.........12ms...........£239.99
520MB.........12ms...........£429.99
All 2.5" Drives include IDE cable

3.5" IDE

365MB.........12ms...........£149.99
548MB.........12ms...........£189.99
3.5" Hard Drives will fit into the A1200/4000 (cable required for A1200 £19.99 - SEE ACCESSORIES). When you purchase your drive from us we can fit it for a charge of £19.99 (including collection & delivery). Please confirm current prices & availability before ordering.

EXTERNALLY CASED DRIVES

1200 OVERDRIVES

270MB £239.99
420MB £249.99
540MB £279.99
730MB £349.99
1-GIG £474.99

A500 ALFA POWER EXTERNAL

270MB £234.99
420MB £259.99
540MB £289.99
730MB £349.99
1-GIG £489.99
Alfa Power HDs plug into the DMA port of the A500. Can be populated with up to 8MB of fast ram. Requires KickStart V2+.

SX1 - CD32 EXPANSION MODULE

Turns your CD32 games console into a full Amiga computer.
With FREE GoldFish CD £194.99
Keyboard for SX1 ....£37.99

GOLIATH 200W POWER SUPPLY

High powered PSU for the Amiga. Ideal replacement. Only £44.95

LOOK AT WHAT YOU GET FROM OUR HDs

- Drives come ready to run prepped and formatted with WB ✓
- Installed with 100MB of FREE top quality Public Domain Software. ✓
- Only quality drives used, with at least 1 year warranty (Most 2 to 5 year). ✓

PRINTERS

EPSON

Stylus Colour Inkjet Printer Photographic quality output when used with optional 720DPI printer driver (coated paper required). Built in auto-sheetfeeder.
Only **£429.99**

STUDIO 2 - PRINTER STUDIO

Professional print studio for the Amiga. Enhance the output of your printer Inc 720 DPI on EPSON STYLUS Colour.
Only **£49.95**

Canon

BJ10sx Low Cost A4 BubbleJet 360 DPI..**£179.99**
BJ200 Mono BubbleJet Printer 80 Page Auto Sheetfeeder.
360 DPI..**£239.99**
NEW...**BJC4000** Colour BubbleJet Colour 360DPI – Mono 720 x 360 DPI.
An Amazingly Low **£399.99**

CDROM DRIVES

MITSUMI QUAD SPEED

Internal 600KB Per Second Transfer Rate **£199.99**
Requires Tandon CDROM Controller **£69.99**

CD32 CRITICAL ZONE PACK

32 Bit CD Console. With 7 games Inc Cannon Fodder, Ultimate Body Blows & Liberation. ....**Only £239.99**

IN STOCK NOW!!!

A1200 BLIZZARD 1220/4 NEW!!!

Make your A1200 faster than an A4000/30 with this 4MB accelerator. Fits into the trap door. Expandable to 8MB RAM.
NOW AVAILABLE!!! **£229.99**

A1200 BLIZZARD 1230/4 MKIII

50MHz 68030+MMU.
NOW AVAILABLE!!! **£229.99**
4MB RAM for A1230.......................**£130.00**

CYBERSTORM 040/40

Dramatically speed up your A4000 with this replacement daughterboard .**£999.99**

MODEMS

ALTO 14,400 External fax modem......................................**£139.99**
ALTO 28,800 External fax modem.
Fax class 3, V34 ....**£229.99**
Modems come supplied with Cables, manuals and Comms software.

MEMORY SIMMS

4MB 72 Pin 70ns £139.99
8MB 72 Pin 70ns £279.99
16MB 72 Pin 70ns £449.99

DISK DRIVES

- Amitek Amiga External £59.00
- A500 Internal £44.00
- A600/A1200 Internal..............£49.00

FUSION GENLOCK

Mixes video & computer graphics with ease. Inc. free Scala HT100 .....**£99.99**

RAM BOARDS

Machine	Memory	Clock	Price
A500	0.5MB	No	£20.99
A500	0.5MB	Yes	£25.99
A500+	1MB	No	£30.99
A600	1MB	No	£30.99
A600	1MB	Yes	£40.99
A1200	2MB	Yes	£134.99
A1200	4MB	Yes	£189.99

PRO-GRAB 24RT

PARALLEL PORT VERSION

24BIT Real-Time Colour Digitizer. A1200/4000 Recommended. 2.04 & 1.5 MEG Required. ....**Only £129.99**

PCMCIA VERSION

Same Specification as above. Increased speed. ....**Only £159.99**

ACCESSORIES

3.5" – 2.5" HD Lead £19.99
Canon BJ-10 Refills £12.99
Midi interface £19.99
MegaMouse 400DPI £14.99
Parnet Lead Inc Software £10.99
Mouse Mats £1.99
Amiga Dustcovers.........................£4.99
Parallel Printer Cable..................£7.99
50 Capacity Disk Box....................£3.50
100 Capacity Disk Box..................£5.99

TDK FLOPPY DISKS

Call for best prices on TDK DS/DD.
From. ....**30p each**

SQUIRREL SCSI2 INTERFACE

Fits into the PCMCIA interface of your A1200. Fast SCSI2 interface to connect CD Drives, Hard Drives, Etc.
With Software ....**Just £69.99**

DELIVERY CHARGES

STANDARD (3-4 DAYS)..............£3.95
NEXT DAY COURIER £5.95
SMALL ITEMS £1.95
All prices include VAT
Prices are correct at time of going to press

HOW TO ORDER

BY POST - Please make cheques & postal orders payable to ***"VISAGE COMPUTERS"***. Please allow 5 working days for cheques to clear.

BY PHONE - Orders taken from 9.30am to 5.30pm.

CALL (0115) 944 4501 TO PLACE YOUR ORDER

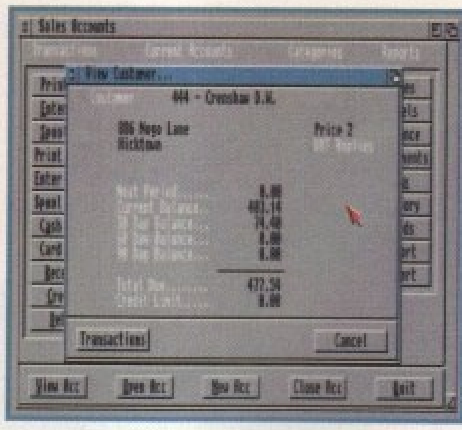
Every small business owner knows that cost cutting is a key element to staying afloat in financially hard times. Clear and concise organisation of costs, expenses and wages are vital. Computers over the last few years have helped businesses move from forests of intimidating paperwork into a single machine with hopefully two hard drives – one to use, the other for back-up purposes.

At present the PC rules, dominates and monopolises the work place. Whether it be a 286 or a Pentium, many companies have made the switch. What about the alternatives, though, to the grossly expensive kit needed to run some of the more user friendly, graphically pleasing packages that have a resounding price tag starting from £150 themselves ?

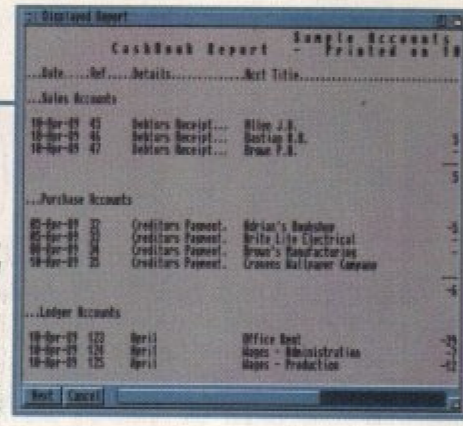
There's the Mac which, unfortunately at the moment, doesn't have any real accountancy programs to mention. Then there's the Amiga – a fraction of the cost of a PC and now, with the arrival of Easy Ledgers 2 at a mere £29.99, a very viable contender as a business machine for company accounts.

Coming on a single disk, the program is hard drive installable only but very simple to set up. To stop the likes of pirates sinking their teeth and hacking claws into the made-in-Australia title, a dongle has been included to slot into the joystick port on the Amiga, and a 208 page manual, nicely binded and an essential addition, has been included to wear any potential thief's photocopier out.

This is divided into four principle 'books', but despite the excellent instructions, the user is going to need their imports sorted from their exports to get cracking with the wealth of facilities open to them with Easy Ledgers 2.



Check up on customer details and whether they are falling behind on payments



Comprehensive listings and cross referencing can be called up with ease in Easy Ledgers 2

Easy earnings

With Britain edging its way out of those crippling recession-stricken years, Adam Phillips looks at a package that'll aid small businesses invaluably

The four books are purchases, sales, ledgers and jobs. Clicking on one of these takes you into their specific sub-directories. Sales and purchases are obviously there to keep track on all the selling and buying that goes on in a thriving company, and invoices are easily produced with a few keyboard entries.

The Ledger is vital for detailing credits and debits, the Inventory holds all details of stock prices and quantities and, finally, the jobs icon gives you a breakdown of all work finished, in progress or just simply a quote to a potential customer.

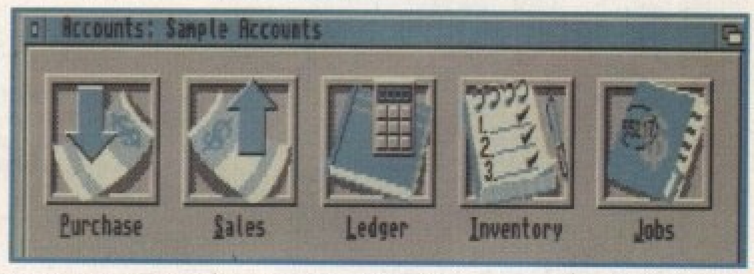
COMPLEX

It has to be said that while the package is easy to use once set-up, actually doing so is a complex affair. At the end of the day though, it doesn't matter how user-friendly a package is – it's going to take time to master anything that deals with facts and figures of this nature.

There are masses of nominal codes for users to apply their own values to and there's little chance of ever actually running out. Customer lists, receipts, balances and credit card details can all be stored, shown on screen, exported to disk to be used on other packages, and printed out to show those dreadfully nice people at the Inland Revenue when they come aknocking.

If I have any criticism it would have to be the ledger. On most packages, when altering the balance you would not be allowed to go out of balance at any point without the computer telling you so. In Easy Ledgers 2 you can do all your readjustments, leave and then only be told when you try and move into another section that you're in the minus figures.

This may sound like a minor detail, but when entering large amounts of figures it's always highly beneficial to be told at the time if something is wrong, and not later. Other than this though, for small businesses and dare I say it, medium-sized businesses as well, Easy Ledgers 2 makes perfect economic sense and has to come highly recommended. Coupled with a low price and a substantial amount of facilities that could fill several pages of this mag, accountancy has never had it so good.



The four books' panel which forms the hub of Easy Ledgers 2. Click on one of the icons and off you go

Resentful

Fortunately for Easy Ledgers 2, this package isn't an example of a jack-of-all-trades, master-of-none. Produced by some of the programmers that created utility masterpieces such as Directory Opus, this all-in-one accountancy software has created something of a stir in the accountancy department at IDG simply because, on first impressions for the price, they've been impressed by the value for money on offer here.

Indeed, as you read, resentful looks at expensive PC-based hardware and software are being exchanged.

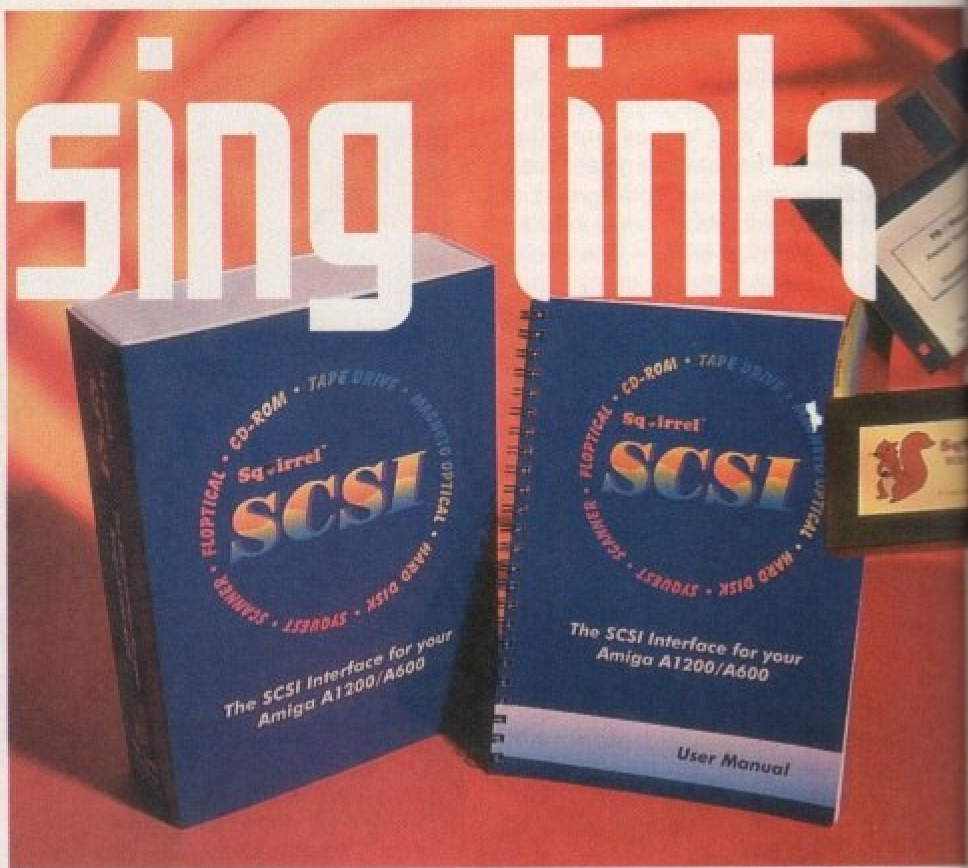
The bottom line

Product: Easy Ledgers 2
Price: £29.99
Supplier: Wizard Developments
Telephone: 01322 272908

Ease of use	8
Implementation	9
Value for money	9
Overall	9

The missing link

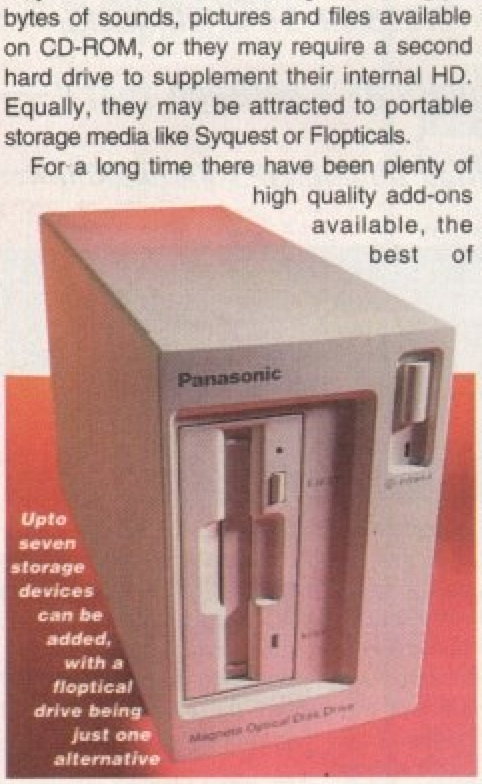
There are lots of tasty peripherals to add to your Amiga, yet for years owners have been denied a cheap, effective way of using them. Gareth Lofthouse reports on how Hi-Soft's Squirrel bridges the gap



AMIGA BLUE CHIP AWARD

Storage is an issue that every Amiga enthusiast will have considered in one way or another. It may be that they're interested in benefiting from the gigabytes of sounds, pictures and files available on CD-ROM, or they may require a second hard drive to supplement their internal HD. Equally, they may be attracted to portable storage media like Syquest or Flopticals.

For a long time there have been plenty of high quality add-ons available, the best of which were SCSI-compatible devices. Unfortunately, A1200 and A600 owners had no truly affordable way of using SCSI devices, which meant their options for expansion were severely limited.



Upto seven storage devices can be added, with a floptical drive being just one alternative

Now, Hi-Soft have produced the Squirrel SCSI device as an answer to this problem. Named after the famous storage-hungry animal, this utilitarian-looking device certainly isn't cute, but it could prove invaluable.

The Squirrel package incorporates the device itself, software to run it, plus a couple of disks worth of useful PD programs applicable to using the product. Mercifully, since SCSI chaining isn't always as simple as it may appear, Hi-Soft have also included an extremely comprehensive manual.

The hardware itself is very small, consisting of a black card connected to a SCSI cable. This cable is rather short but that's sensible when you realise the total length of the SCSI chain's cabling shouldn't exceed a certain length.

The Squirrel fits into the otherwise unused PCMIA slot on the side of your Amiga. Physical connection is a precarious procedure because the pins inside your machine are extremely delicate, but that's a problem with the Amiga hardware rather than the SCSI device. Using the PCMIA slot as the connection port has the benefit of leaving the usually more valuable trapdoor slot free.

Unfortunately, the PCMIA interface can interfere with some memory expansions using the trapdoor, but again that's an Amiga hardware problem rather than anything to do with Hi-Soft. At least this connection method avoids the need to open up your Amiga, which means there's no danger of invalidating the warranty.

The PCMIA is supposed to allow for 'plug and play', which means you should be able to plug and unplug the Squirrel whether your Amiga is on or off. This could be slightly misleading when it comes to attaching the SCSI peripherals, however, since the manual recommends that the peripherals and the computer are turned off during the procedure. The best advice is to err on the side of caution.

GUIDELINES

Setting up a chain of peripherals (SCSI allows up to seven to be attached) will generally be a problem-free process, providing some basic rules are followed. For each SCSI device on the chain you must select a different number between nought and six to allow them to communicate together without conflict.

This is rarely a difficult task since virtually all SCSI devices have little switches on the back allowing adjustments to the ID number to be made quickly. The only possible problem may arise if there's no external switch at all – however, there is probably a way of using the peripheral even if it means using the device as the only machine in your chain.

Termination, on the other hand, can be a more problematic issue. Basically, each end of the chain must be terminated to avoid 'bounce back' interference. Trouble arises if, for example, an internally terminated device is placed in the middle of the chain or one end is not terminated at all.

Thankfully, Hi-Soft have not taken a great

New horizons

To get an idea of just how much flexibility the Squirrel allows for, here are some of the devices you could be adding to your Amiga.

1. Hard Drives: SCSI is very fast, but limitations with the hardware mean you won't get the benefits of ultra-speedy Hard Drives. Nevertheless, that extra space could prove invaluable.

2. CD Drives: Hi-Soft have their own range, but you should be able to use any CD-ROM Drive – including the latest jukebox disc changers !

3. Syquest Drives: High-capacity storage media with the advantage over your hard drive of being portable.

4: Magneto opticals: Again cartridge based, but this media uses a laser to read/write information. Rather a pricey option.

5: Tape Streamers: Most affordable method of backing up large volumes of data

6: Printers: Not directly supported in the software, but if you do have a printer with a SCSI interface, connecting it for use should be simple.

7. Scanners: Some scanners are also SCSI compatible – and that makes seven devices for starters.



deal of technical knowledge for granted, so the ring-bound manual provided is very comprehensive and gives clear explanations of the more difficult areas of SCSI chaining. Add to that the fact that you will get free technical support for one month after purchase and it seems even a patient simpleton will be able to overcome problems should they occur.

Tecchies, and those with the need for speed, will be pleased to know that the transfer speeds achieved through the Squirrel are very reasonable – a rate of 1.2 Mb per second can be attained on the standard Amiga. The box claims that 3 Mb/sec is possible on an accelerated machine, but unfortunately 1.6Mb



PD software is supplied, including a number of audio players like Jukebox

is closer to the mark at the moment. This is not, as some have claimed, the fault of the PCMIA slot (which should allow for a transfer of 3Mb per second) but rather the fact that faster hardware would inevitably prove more costly to produce. Despite this limitation, the Squirrel will allow for transfers at speeds double that of your IDE drive, and for 95 per cent of us that will do very nicely indeed.

HELPING HAND

That's the hardware pretty much dealt with, but of course the software supplied is equally important. Installation couldn't be easier, and again the manual supplements the Commodore installer program with helpful advice concerning the questions you will be asked during the process.

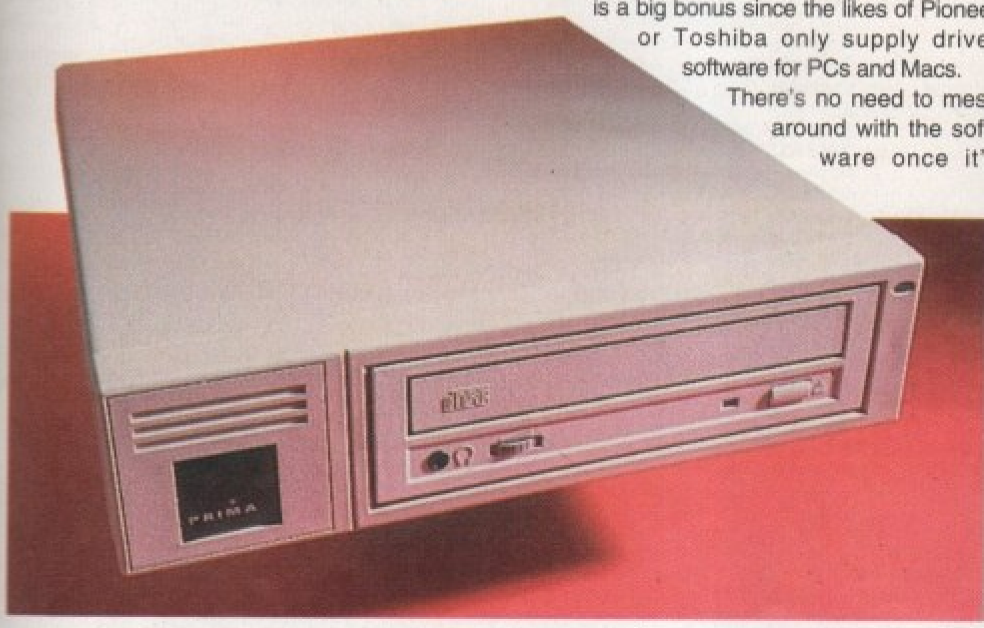
Most important is the inclusion of the vital software drivers which allow devices to be used. This means you should be able to use any SCSI CD-ROM drive, for example, which is a big bonus since the likes of Pioneer or Toshiba only supply driver software for PCs and Macs.

There's no need to mess around with the software once it's installed. Every time you plug your Squirrel in it will mount and dismount devices on the chain automatically.

For the game players out there, the software is even better thanks to the in-built CD32 emulator. Until very recently, A1200 users who wanted to play CD32 games could only do so using a Zappo drive which, while being a perfectly good product, suffered from the limitation of not being a SCSI unit.

Now, however, the Squirrel allows you to buy any CD-ROM Drive and it will run the majority of CD32 titles available. It should be remembered, however, that A600 users will not have this option available since they lack AGA graphics capability.

As a final bonus, there are also two disks of PD software which include a variety of audio players so you can use the drive for music CDs. When you realise that computer drives are often better for audio reproduction than the average Hi-fi CD player, thanks to their greater accuracy, such additions begin to look very handy. There's also a CD to HD sampler for users of music editors.



Everyone wants to get into CD Rom, and the Squirrel gives you the biggest range of options

Verdict

Considering its potential, this is undeniably a very humble, not to mention dull piece of equipment to look at. I just hope this doesn't prompt any Amiga owners to turn the page before they've considered what the Squirrel can do for them.

It's hard to think of any package in the Amiga's history that has done so many things for such a small amount of money. Not only is SCSI now an affordable option for A1200/600 users, but it allows them to use a huge range of peripherals.

Add to that the CD32 emulation software and the quality of the documentation, and this product's exemplary standards become clear. Yes, the Squirrel is small and modest – but if you ever want your Amiga to evolve, do not overlook this product.

SCSI 2: What and why ?

The A1200 and A600 include an IDE interface as it is, so you may be wondering what's wrong with this method of connecting peripherals? Well, the problem is that the IDE interface was originally designed with just hard drives in mind and consequently suffers from marked limitations in comparison to SCSI. IDE, for example, can only control two devices at any one time, whereas the Squirrel can handle up to seven.

SCSI stands for Small Computer System Interface, and is an international standard allowing different hardware devices to talk to each other. By now, most people are aware that SCSI represents the most desirable and professional method of expanding their computer.

The difference between SCSI 1 and SCSI 2 protocols, however, may leave people with some confusion and uncertainty. Since the Squirrel is a SCSI 2 device, owners of peripherals that use the older standard may fear compatibility problems.

Thankfully they need not worry. SCSI 2 is a new standard which makes improvements in the speed and power of the system, but compatibility was retained with the existing SCSI chips. So, even if you do have a SCSI 1 device, you should have no problems using it with the Squirrel.

SYSTEM ESSENTIALS

RED = Essential **BLACK** = Recommended



A1200 or A600

The bottom line

Product: Squirrel SCSI device
Price: £69
Supplier: Hi-Soft
Tel: 01525 718181

Ease of use	**8**
Implementation	**10**
Value for money	**10**
Overall	**9**

17 BIT Software
EST 1988

POSTAGE INFORMATION
Please Include 50p Postage For UK Disk Orders And 75p Per Item For CD Orders (Max Postage Payable £1.50)
Europe Add 10% For Disk Orders & 1.00 Per CD (Max £5.00)
R.O.W Add 20% For Disk Orders & £1.50 Per CD (MAX £6.00)
All Orders Sent 1st Class Or Air.

1st Floor Offices, 2/8 Market Street
Wakefield, West Yorkshire WF1 1DH
TEL (01924) 366982 FAX (01924) 200943
Monday To Saturday 9.00 am Till 5.30 pm
Answerphone At All Other Times

£1.00 PER DISK

AMIGA PUBLIC DOMAIN

3620 FILER V3.23
Superb Directory Opus Clone
3619 PENGO DEMO
Superb Pengo Clone!
3618 FINDING THE TRUTH 3
UFO Diskmagazine.
3617 ROBS HOT STASH #35
Always Red Hot New Utils
3616 ROBS HOT STASH #34
Another Superb Utils Comp.
3615 (ABCD) CHARLEY CAT 11
"Gardening Cat" 2.5MB Anim
3614 TURBOCAT
Shareware Cat Disk Maker
3613 TRILEMMA V5.0
Barmy But Great Puzzle Game!
3612 THIRD DIMENSION #11
3D Cons Kit Disk Mag
3611 (AB) CYBERGAMES
Excellent Beat Em Up!
3610 JUMP'EM
Bouncing Skill / Puzzle Game
3609 INFECTION
Exellent Puzzle Game
3608 DEMON V1.01
Patience Type Card Game
3607 FLOWERS CARDSET
For Klondike 1,2 or 3
3606 PHOTO CD CARDSET
For Klondike 1,2 or 3
3605 BARTENDER V1.1
Superb Cocktail Database!
3604 BEGINNERS GUIDE TO WB3
Handy, Easy Tutorial For WB3
3603 GFX UTILS & ICONS
Includes Icontools Etc.
3602 NEW UTILS #9
Collection Of Useful Utils
3601 NEW UTILS #8
Includes VChecker 6.52
3600 (AB) FINDING THE TRUTH
Disks 1 & 2 About Aliens & UFO.
3599 ROBS HOT STASH #33
Stacks More Superb Utils!
3598 PRETTY WOMAN CARDSET
For Klondike AGA
3597 FINAL WRAPPER V3.0
Includes Loads Of Macros Too!
3596 DELUXE GALAGA V2.5
Mega Mega Mega Game!
3595 PUCMAN
Arcade Perfect Pacman!

3594 PARNET HD!
The All New Parnet!
3593 LEAGUE SOCCER CARDS V1.1
Soccer Cards Game.
X3592 JPEG AGA V2.1
Best AGA Jpeg Viewer
3591 COINMANIA PREVIEW
Playable Puzzle Game
3590 (AB) HOLIDAYS
Tutorial On Good Photography
3589 (AB) PHOTO TECHNIQUES
Good Photo Tutorial
3588 IMAGEDESK V1.2
Create Thumbnail Pics
3587 BOING V3
Thing On A Spring Clone
3586 ROBS HOT STASH #32
Includes BJC600 Drivers!
3585 NEW UTILS #7
More Bits & Bats.
3584 ROBS HOT STASH #31
Another Hot Utils Collection
3583 AGA SPECCY EM V1.6b
Includes A Few Games Too!
3582 NEW UTILS #6
More Upto Date Utils
3581 INTERNET UTILS
Includes IRC Chat Client
3580 (AB) PAGESTREAM 3F UPDATE
Updates To 3F From 3D.
3579 ROBS HOT STASH #30
Another Packed Utils Disk!
3578 FRACTALS CARDSET
3577 MARILYN 2 CARDSET
For Klondike 1,2 or 3
3576 DIYREKO
Create Klondike Sets With ImageFX
3575 ACHILLEOS CARDSET
3574 DRAGONLANCE CARDSET
3572 BEAUTY CARDSET
3571 CINDY 2 CARDSET
For Use With Klondike AGA
3570 ROKETZ V2.25
Great Thrust Type Game
3569 (AB) MAG.E ISSUE 7
Popular Sci Fi / RPG Mag
3568 LETHAL FORMULA
Graphic Adventure Game.
3567 POKER MANIA
Good Computer Poker Game!
3566 F1 DEMOS
Inc. Erik, Jr Artist & Ultimate Quiz

3565 THIRD DIMENSION #10
The 3D Cons. Kit Disk Mag
3564 SAMURAI SHOWDOWN
Demo Version. Beat Em Up
3563 GRAPHIC UTILS #2
Utils & Magic WB Icons
3562 (AB) TRAVEL GUIDE
Travel Guide To The World
3561 CYBERPUNK NOW #4
Lots Of Cyber Related Articles
3560 NEW UTILS #5
Latest Utils Stash!
3559 DESERT ISLAND DICK
Funny B & W Animation
3558 (AB) MAD HOUSE
Superb Lucas Arts Style Adv.
3557 ROBS HOT STASH #29
Includes Viruschecker 6.50
3556 FINAL WRITER PATCH
Speeds Up Final Writer By Upto 400%!
3555 WORLD HISTORY TIMETABLE
Hyperbook History Program
X3554 (AB) DOVE DEMO BY ABYSS
Superb Demo From Party 4.
X3553 (ABC) VIRTUAL DREAMS
Best Ever AGA Demo!! HD. Required
3552 (ABC) IMAGINE OBJECTS
Starwars Objects. Xwings, Ywings Etc
3551 MUI V2.3
Latest Magic User Interface
3550 (ABC) LION KING CLIPART
Lots Of Cute Hi Res Cliparts
3549 SUICIDE MACHINE
Operation Wolf With Furry Animals!
3548 VIRUS WORKSHOP 4.7
Kill Those Nasty Viri!
3547 AGA ICON DISK
More 256 Colour Icons
3546 HD GAMES INSTALLER 2
Installs Over 20 Differents Games
3545 PHASE 4 INDEXER
Adds Front End. 2 Drives Req.
3544 JUMBO JAM
Overhead Driving Game
3543 INTERNAL COMBUSTION
Another Super Sprint Clone
3542 ROBS HOT STASH 28
Another Hot Utils Comp.
3541 ROBS HOT STASH 27
Includes Latest VirusZ II
3540 IMAGINE BITS & BOBS
Inc. Arexx Scripts For Imagine 3

3539 GAMES DISK
Top Hat Willy & Crazy Challenge
3538 MAGIC SELECTOR V1.40
Changes Backdrops & Adds SFX.
3537 TERM V4.2 EXTRAS
Includes Libs & Locale.
3536 TERM V4.2 030+ VERSION
Archived with NO Installer!
3535 TERM V4.2
000 Version With Docs.
X3534 LION KING CARDSETS
For You Know What!
3533 THIRD DIMENSION #9
3D User Magazine
3532 DYSK-STIK V1.1
Superb Disk Label Printer!
3531 ON FORM V1.33
Superb Invoice Printer
3530 ADDRESS PRINT V4.4
Address & Mailshot Prog.
X3529 PERIHELION CARDSET
Fantasy / Sci Fi Cardset.
X3528 RIPPING YARNS CARDSET
British Cartoon Raunch Cardset!
X3527 SHERYLIN FENN CARDSET
Saucy Klondike Cardset
X3526 VIPER AGA
6 Player Light Cycles. Shareware.
3525 ROBS HOT GAMES #11
Loads Of New Games
3524 MINIMORPH V1.1D
Latest Morphing Package
3523 MAGIC WB ICONS
Yet Another Disk Full!!
3522 ROBS HOT STASH 26
Includes Exotic Ripper V3.0b
3521 NEW UTILS
Includes new Jpeg Datatype
X3520 NORMAL CARDSET
For Klondike AGA
3519 VISUAL ARTS V2.0
Very Powerfull GUI Designer.
3518 ZAXXON
Superb C64 Classic Conversion!
X3517 (ABCD) KILLING TIME DEMO
Stunning 4 Disk AGA Demo
X3516 (ABCD) TWISTED AGA
Superb AGA Demo! Needs Fast RAM.
X3515 NEXUS 7
AGA Demo By Andromeda
X3514 (AB) MOTION OMGIN 2
More AGA Excellence

AMIGA CD ROM'S



ILLUSIONS 3D £9.99
Hundreds Of Random Stereograph Pictures Complete With The Utils You Need To Create Them!



THE LIGHT WORKS £39.99
Superb Collection Of Imagine, Cinema4D & Reflections Objects And Textures, Mainly From Tobias Richter! Utterly Stunning Stuff!



SPECCY SENSATIONS £19.99
Full Of Nostalgic Speccy Games Complete With Emulators For Both Amiga & PC!



AMINET 5!! March 1995 £14.99
This Release Contains Over 440MB Of NEW Data Including Over 1000 Games! Since No. 4!



LSD COMPENDIUM VOL 2 £19.99
Sequel To The Well Received LSD CD. Improved Menu, More AGA Stuff, Online Degrader Etc.



AMINET SET [4 CD's] £29.99
Aminets 1 to 4, Recompiled With NO Duplication! This Set Even Includes NEW Aminet DATA!



ANIMATION CD [Double] £19.99
2 CD's Containing A Plethora Of Superb Amiga Animations. Even Includes Converted PC Anims!



3D ARENA £19.99
Imagine, Lightwave & Real 3D Objects Galore From The 24 Bit Club In Scotland!

THE FINAL FRONTIER DISKZINE
ISSUE 8 NOW IN STOCK
£6.95

F1 PRICES
1 DISK F1 TITLE £3.99
2 DISK F1 TITLE £4.99
3 DISK F1 TITLE £5.99
4 DISK F1 TITLE £6.99
5 DISK F1 TITLE £7.99
THE NUMBER IN BRACKETS AFTER THE DISK CODE DENOTES THE NUMBER OF DISKS IN THAT SET

F1 LICENCEWARE

F1 072 (4) SEAMUS O'MALLY
F1 071 MUSIC 2 TAB
F1 070 SOUNDS COMPLETE #1
F1 069 GCDIR
F1 068 AQUANAUT
F1 067 (2) BUBBLE TRUBBLE
F1 066 (3) G.R.A.C
F1 065 ULTIMATE QUIZ #2
F1 064 GAME MUSIC VOL #1
F1 063 SPEEDTRIS
F1 062 JUNIOR ARTIST
F1 061 CAPTAIN CARNAGE
F1 060 THE ULTIMATE QUIZ VOL 1
F1 059 PUNTER V2.0
F1 058 BLAST EM!
F1 057 COLOUR MATHS
F1 056 GIDDY II
F1 055 (3) AMOSZINE #4
F1 054 OFF YOU GO
F1 053 WHEELIE
F1 052 OPERATION FIRESTORM
F1 051 (2) INTRODUCING WBENCH
F1 050 (2) ABS. BEG. GUIDE. AMOS
F1 049 (3) AMOSZINE #3
F1 046 ERIK
F1 047 F1 MUSIC VOLUME 4
F1 046 MAZE MADNESS
F1 045 T-TEC MAZE
F1 044 (3) BLACKBOARD V3.0
F1 043 (5) MAGPIES CLIPART
F1 042 (2) KIDS CLIPART
F1 041 GP MANAGER 94
F1 040 (2) HENRYS HOUSE
F1 039 TWO CAN PLAY
F1 038 AMBASSADOR PRO
F1 037 SUPER BINGO V2
F1 036 MONEY CASCADE
F1 035 (3) CHILLY CHAVEZ
F1 034 F1 CHALLENGE V2
F1 033 POWERPLANNER V1.1
F1 032 WORD POWER V2.0
F1 031 POWERBASE V3.30
F1 030 FORTRESS 1 MEG
F1 029 (2) AERO DIE NAMIX
F1 028 CLINDEX V1.0
F1 027 THE STATES OF EUROPE
F1 026 TAKE A LOOK AT EUROPE
F1 025 (2) ART SCHOOL V1.1
F1 024 MATHS MONKEY
F1 023 PICK N STICK
F1 022 ASK ME ANOTHER
F1 021 MULTIPLAYER YAHTZEE
F1 020 IMPACT
F1 019 TOUCH N GO
F1 018 (4) RELICS OF DELDRONEYE
F1 017 F1 MUSIC VOL #3
F1 016 ART SCHOOL
F1 014 TOTS TIME
F1 013 THROUGH THE RED DOOR
F1 012 OBLITERATIVES
F1 011 IFF VECTOR BALL DESIGN
F1 010 KARATE MASTER
F1 009 THE RAINY DAY DISK
F1 008 F1 MUSIC VOL #2
F1 007 FORTRESS (2 MEG CHIP)
F1 006 (2) BLACKBOARD V2
F1 005 F1 MUSIC VOL #1
F1 004 SUPERFUN
F1 003 AMOS FOR BEGINNERS
F1 002 CRICKET CRAZY
F1 001 MAGNUM PRO

WE STOCK ALL THE TITLES SUPPLIED BY F1 LICENCEWARE

17 BIT Software

EST 1988

CD ROM PRICE MATCH
WE WILL DO OUR BEST TO MATCH ANY CD LISTED ADVERTISED ELSEWHERE. ALL ORDERS SENT SAME DAY 1st CLASS POST

1st Floor Offices, 2/8 Market Street
Wakefield, West Yorkshire WF1 1DH
TEL (01924) 366982 FAX (01924) 200943
Monday To Saturday 9.00 am Till 5.30 pm
Answerphone At All Other Times

UK & OVERSEAS TRADE ENQUIRIES WELCOME ON ALL CD'S LISTED

AMIGA CD ROM'S

PRO FONTS £19.99
Over 4000 Adobe Type 1 Fonts, 1500 True Types, 200 CG Fonts And A Whole load Of PCX, GIF, EPS & TIF Clipart!

DEMO CD II £9.99!!
For Those That Like A Broad Spectrum Of Titles From The Demo World, This CD Is Ideal.

W.S CLIPART £9.99
Another Superb Budget CD! Includes The Following Formats:- Pagestream, Pagesetter, EPS, IMG, IFF And More!!

AMINET III [JULY 1994] £14.99
Easily A Top Seller, This CD Contains 650 MB Of The Aminet Archives From The Internet. Something For Everyone Here!

ULTIMEDIA VOLUME 1 £14.99
Megabytes Of Images, Textures, Sounds & Pictures. IFF, GIF, WAV, FLIC Etc. Utilities To View Are All Included On The CD.

TOWN OF TUNES £19.99
Superb Compilation Of 1000 Of The Very Best Music Modules Around. All Files Were Hand Picked For Excellent Quality.

AMINET 4 [NOV 94] £14.99
Over 330 MB Of NEW Data From The Internet Since The Aminet 3. This One Has A Bias Towards Music & Utilities.

RAYTRACING VOL 1 £19.99
Another CD Full Of Objects, Textures & Attributes. Excellent Value For Those On A Limited Budget.

SOUNDS TERRIFIC £19.99
A Superb Double CD Collection Containing Over 1.2 GIGS Of Music Modules & Sound Effects! Superb Value For Money!

EMERALD MINES CD £14.99
CD32 Or Zappo Drives Only. This CD Contains Over 10,000 Levels Of The Classic Emerald Mine Games!

17 BIT PHASE 4 £19.99
The Sequel To The Sequel! Contains Our Latest Disks From 2801 To 3351, Presented Via An Excellent Easy Menu!

WEIRD SCIENCE FONTS £9.99
This Excellent Budget Fonts Disk Contains Thousands Of Fonts From The Following Types:-CG, Adobe, IFF, PCX, PS & MORE!

CDPD 4 £14.99
Contains Fish From 890 To 1000. Complete GNU C++ Compiler With Includes, Loads Of Imagine Objects & Lots More!!

17 BIT CONTINUATION £14.99
Disk 3 Of The Series, This One Contains Disks 2301 To 2800 Of Our Library With The Added Bonus Of Several Other Ranges!

GIFS GALORE CD £19.99
Contains Over 5000 GIF Images From Over 40 Subjects Inc. Art, Cars, Fractals, Space, Swimsuit, Raytrace Etc.

SPACE & ASTRONOMY £19.99
Suprisingly Popular CD ROM Containing Images Taken From Deep Space Probes, Along With Over 5000 Official NASA Texts!

IMAGINE CD £39.99
One Of The Most Complete Collections Of Textures, Objects, Backgrounds & Attributes Available For Imagine Users!

GOLDFISH 2 CD £29.99
Contains Everthing Produced By Fred Fish AFTER Disk 1000. Literally HUNDREDS Of Superb Amiga Programs!

RAYTRACING VOL 2 £19.99
3D Object Overload! If You Raytrace, You Really DO NEED These Superb CD's! You Can Never Have Too Many Objects!

AMOS USERS CD £19.99
This Disc Is Invaluable For Amos Users! Includes Source, Sprite & Music Banks As Well As The Entire Amos PD Library!

ULTIMEDIA VOLUME 2 £14.99
More Animations & Images In GIF & IFF, Sound In WAV Etc! Superb!! All Neccessary Utilites Are Included On The CD.

AMIGA DTV CD £14.99
Backgrounds, Fonts, Objects Titling & Video Utils, Clipart, You Name It!!. Superb Value For Any DTP User!

DEMO CD £9.99!!
A Little Dated Now, But Still Contains Some Classic Software. Loads Of Music Mods, Demos, Anims Etc.

IMAGINE ENHANCER £49.99
Contains Exclusive Data Covering Objects, Maps, Fonts, Backdrops, Demos & Gallery.

EUROSCENE 1 £9.99!
If You Want Nothing But Music & graphics Demos, Then This CD Is For You. Includes Demos From The Gathering 93 & 94!

17 BIT COLLECTION £29.99
2 CD's Containing 1700 Disks From Our Own Library. All Titles Are Easily De-Archived Via A Simple To Use Menu.

LSD COMPENDIUM £19.99
You Name It, You Will Find It On Here! Games, Demos, Mods, Anims, Pix, Not To Mention The Fabled LSD Tools Collection!

MULTIMEDIA TOOLKIT £19.99
Another Popular Title, Contains 5000 24 Bit Images With Ham & Ham8 Versions and Loads Of Fonts, Clipart, Mods & Samples

THE LIGHT ROM £39.99
650 MB Of Objects, Images, Scenes, Attribs, Maps & Textures in IFF & Targa Format. A MUST For All Lightwave Users!

THE ASSASSINS CD £19.99
Hundreds Of Games For All CD Platforms Including CD32!! Superb Menu Enables ALL Games To Run Direct From CD!

NETWORK CD £14.99
Link Your CD32 To Any Other Amiga For CD Access. Requires Sernet Cable Available Seperately For £19.99.

LSD COMPENDIUM 2 £19.99
Hot On The Heels Of The LSD CD Comes Its Superb Sequel. Improved Menu, More Features, More Superb Programs!

POWER GAMES £14.99
A Collection Of More Than 500 Superb PD Games Covering CD32, CDTV & CDROM Platforms. Arcade, Adventure, Strategy Etc.

ACCESSORIES

CABLES
PARNET CABLE £9.99
SERNET CABLE WITH KEYBOARD PASSTHROUGH £19.99
NULL MODEM CABLE £9.99
PARALLEL CABLE £9.99

STORAGE BOXES
40 CAPACITY LOCKABLE DISK BOX £4.99
100 CAPACITY LOCKABLE DISK BOX £6.99
30 CAPACITY CD-ROM STORAGE UNIT £14.99

MISCELLANEOUS
MOUSE MAT £2.99
SPLAT MOUSE MAT £3.99
MANHATTAN MICROSWITCHED MICE £12.99

PLEASE INCLUDE £1.50 POSTAGE FOR DISK BOXES

MIDICraft Magazine
The Diskmag That Directly Replaces AM/FM. Packed With Goodies For Musicians, Beginners & Expert Alike
£2.50 PER ISSUE OR £4.50 IF PURCHASED WITH SAMPLES

KLONDIKE CARDSETS!

FOR USE WITH KLONDIKE AGA 1, 2 OR 3!

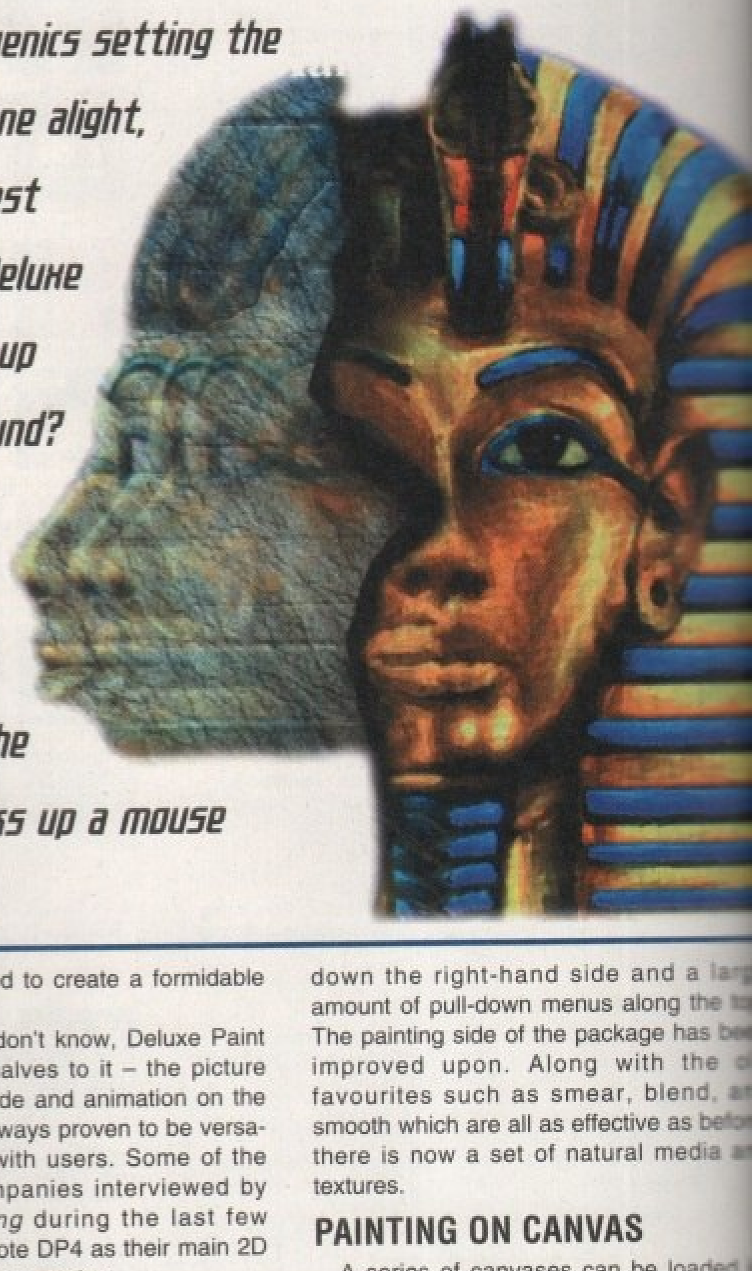
3607 PHOTO CD
3606 FLOWERS
3598 PRETTY WOMAN
3578 FRACTALS
3577 MARILYN MONROE II
3575 ACHILLEOS
3574 DRAGONLANCE
3573 HEROINES
3572 BEAUTYS
3534 LION KING
3529 PERIHELION
3528 RIPPING YARNS
3520 NORMAL CARDSET
3490 ELLE MCPHERSON II
3470 DUNGEONS & DRAGONS
3468 SAILORMOON
3467 RANMA
3412 XMEN
3411 NEXT GENERATION
3408 FACES II
3407 SWIMSUIT
3396 MARILYN MONROE
3353 STAR WARS
3334 BETTY PAGE
3333 STAR TREK
3244 ELLE MCPHERSON
3196 SANDMAN
3195 IRON MAIDEN
3136 ART
3088 HAJIME
3087 ANIME
3086 FACES
3085 CINDY CRAWFORD

THE FOLLOWING WILL NOT WORK ON KLONDIKE 1

3571 CINDY CRAWFORD 2
3527 SHERILYN FENN
3438 FAST CARS
3402 EMPIRE STRIKES BACK
3401 RETURN OF THE JEDI
3400 DR WHO

The next

With Photogenics setting the graphics scene alight, can the latest version of Deluxe Paint catch up on lost ground? Adam Phillips throws his canvas in the bin and picks up a mouse



The Deluxe Paint legend is nearly on par with Lightwave in some quarters. Around since the early days of the Amiga, the package has grown up and finally reached its fifth instalment under the protective wing of software giant, Electronic Arts.

Used for the last few years by amateurs and professionals alike for picture creating, sprite making and animation, its reputation in its field has been second to none. Then Photogenics happened – while not boasting any animation facilities, it's a package that offers some extremely powerful image manipulation functions at a cut-throat price.

With Deluxe Paint 5 and its pedigree in tow behind it, perhaps the young upstart can be put to shame. Well, yes and no...

Coming on four disks with a rather substantial manual weighing in at 337 pages, DP5 requires the minimum of installation fuss. My initial reaction when booting the package up was one of disappointment – the interface remains the same, but for a few tweaks here and there. I can live with this non-development quite happily but the main, immediately obvious gripe is the same old lack of speed – go up to a pop-down menu and it croaks open.

SLOW DOWN

Fair enough that in high resolution modes you're going to have some slowing down but, even on a 4000, the lack of speed is disheartening and easily detracts your attention away from some of the program's powerful features and upgrades. I couldn't help but feel that while there have been fresh rounds of ammo tucked into DP5's artistic arsenal, the same cranking code that made up DP4 remains and doesn't appear to have been touched, even though the manual states differently.

Getting through this disappointment though, and flicking to the new features list in the manual stops this tide of negativity and hope springs forth. There have been over 25 enhancements and updates to the program, some of which are extremely powerful and highly useful.

True Colour and ARexx support, the much needed natural media option, light table enhancements, loading animations of any size, key frame animation, improved file format support that now includes Anim Op-8 as well as the old anim 5 format and many other facilities, options and fancy bits have been included to create a formidable package.

For those who don't know, Deluxe Paint 5 has two main halves to it – the picture creating on one side and animation on the other. Each has always proven to be versatile and popular with users. Some of the professional companies interviewed by *Amiga Computing* during the last few months always quote DP4 as their main 2D image and animation creator.

The main screen is presented as a drawing surface with a list of tools and palettes down the right-hand side and a larg amount of pull-down menus along the to The painting side of the package has bee improved upon. Along with the o favourites such as smear, blend, a smooth which are all as effective as befo there is now a set of natural media a textures.

PAINTING ON CANVAS

A series of canvases can be loaded for example differing oil canvases, w mesh, and varying grades of paper wh can in turn be painted onto with t different brush styles on offer. While the of textures for the canvas may substantial and on the whole look ve effective, there's only a paltry amount brush types available – watercolour, ch felt tip and oil.

Despite this, what is on offer works and satisfying results can be gleaned v quickly. Remember though that this is co puter graphics, not an exact simulation the mediums being emulated – there w a few cases where the reactions seen screen wouldn't happen on a real canvas

24-bit graphics card users can relish the new true colour option which enab the loading, saving and editing

Unarduous animation

The main muscle of DP5's talent is animation and, whether it be brush or camera-based, is simple and produces some highly effective results. With the arrival of the latest version, we can show a couple of new features that deserve a mention:



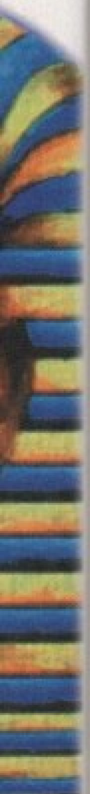
Set your animation frames at the desired amount and stamp your brush down. Calling up the movement menu, notice the adjust button – the ideal way to create beginning and end key frames



Clicking on adjust brings up a wireframe outline of your brush. Move, rotate and manipulate it into the desired position and hit enter. The opening key frame is set. Do the same with end position...



...and hit the draw button. The animation is produced in front of your very eyes. The same process is used to create camera movement



a large
the top.
as been
he old
d, and
before,
dia and

ded in,
s, wire
which
ith the
the list
ay be
k very
ount of
, chalk,

rks well
ed very
is com-
ation of
re were
een on
nvas.
elish in
enables
ing of

t generation

Incisive instructions

There's nothing worse than having a powerful, flexible product being plopped in your lap followed by an illegible, unintelligent manual that makes the package harder to use if you do decide to read it. Witness Imagine 2 and its appalling accompanying paper-wasting literature.

One of DP5's strong points is its mainly well-written manual. Easy to follow with a fair sprinkling of tutorials to break in the computer graphic virgins, Electronic Arts have come up with a hefty but not intimidating tome. There are a couple of weak areas that do need a little time going through them and a few more illustrations here and there would have been nice to exemplify some of the options that aren't massively clear in textual form .

For ARexx users, a full list and description of each available command is documented and should aid the learning curve necessary for picking up the basics of AmigaDOS.

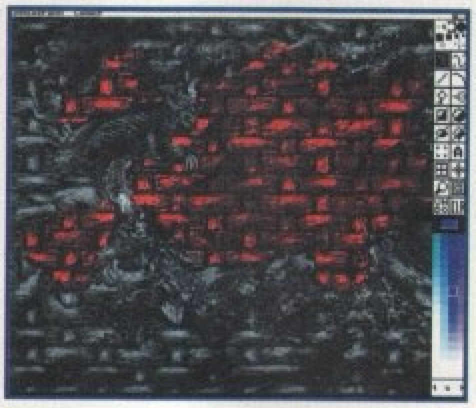
> One of the most welcome upgrades has to be the airbrush and its complete overhaul

24-bit images. This feature is highly useful and an absolutely necessary inclusion for professional users. One of the most welcome upgrades has to be the airbrush and its complete overhaul.

Featuring a rather classy look, the new version puts the speckly, ST-like ancient effort to shame with a smooth spraying action. However, for those who wish to remain faithful to the original tool they've probably been using for years, the makers have kindly included the old version as well.

DP5 also includes an ARexx facility for engineering the paint package to your exact requirements – at last. Through the use of an extensive library of commands listed at the back of the manual with individual descriptions, the user can create the recordings of toolbox choices, menu choices and mouse and screen interactions that can be recalled via the series of user-definable macros available.

The more advanced out there can really



The drawing screen remains the same as ever with only the odd, inconspicuous addition

go to town interacting with other programs and can create complex scripts to suit their needs. The colour side of DP5 has received something of a facelift as well. There's now an option to turn the grid around the colour cells on and off to do accurate side by side colour comparisons, and RGB and HSV sliders are shown simultaneously.

OPTIONS

Also, there are now true RGB colour cells, colour cell extended selections and a larger enhanced mixing area for the palette maestros among you. One feature that has been overlooked and would have benefited the program immensely is the lack of image processing abilities, for example being able to lay a texture over a picture as you can with Photogenics.

There's no emboss, false colour, motion blur, displace or other 'paint-on effects' that could have pushed DP5 in to the pole

A bugging issue

On several occasions while running Deluxe Paint 5, the computer packed in and crashed for no apparent reason. While not devastating by any stretch of the imagination, it's a worrying habit, so remember to save as frequently as possible to avoid losing your work, especially before any major graphics operations.

Another area that requires a whinge is changing the screen modes – when a new resolution is selected the program flicks back to Workbench, changes the resolution and then moves back into the drawing screen. In some cases, though, it remained in Workbench and I had to flick back manually to Deluxe Paint 5. Not a massive complaint but an annoying glitch all the same.

position as the ultimate art tool for professional artists, and given a whole new dimension to the animation side of the package in terms of special effects.

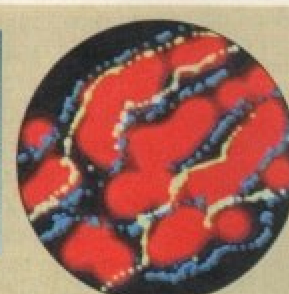
The omission is surprising considering the programmers at Electronic Arts must have seen the potential thorn in their side – Photogenics. Perhaps they didn't realise, or didn't have the time to inject some of the ideas into their own product. Maybe in the next version?

Deluxe Paint's strongest side has always been animation and it's that principle feature that has sold previous versions in lorry loads. One new feature outshines all the other in DP5: Being able to enter your key animation frame at both the beginning and end points of your sequence.

Echoing the user friendliness of Lightwave, select either the start or end of your anim and click on adjust. A wire frame preview of either the beginning or final position of your logo, character or whatever appears on screen. It can then be ➤

Multiple media

There are now a wide range of textures, media and tools to choose from. Here is a list of some of the best and most eye-catching.



The all new and improved spray brush produces professional looking results



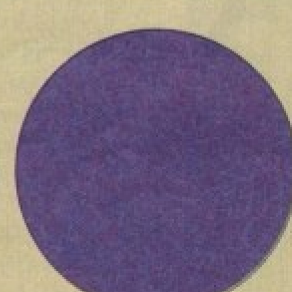
Watercolour – note the lighter tones used to give the impression of water



Rough paper



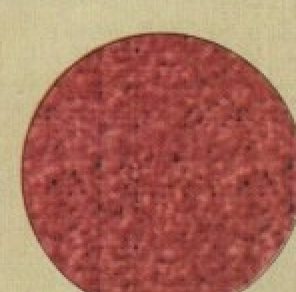
Heavy brush stroke



Manmade marble



Wood grain

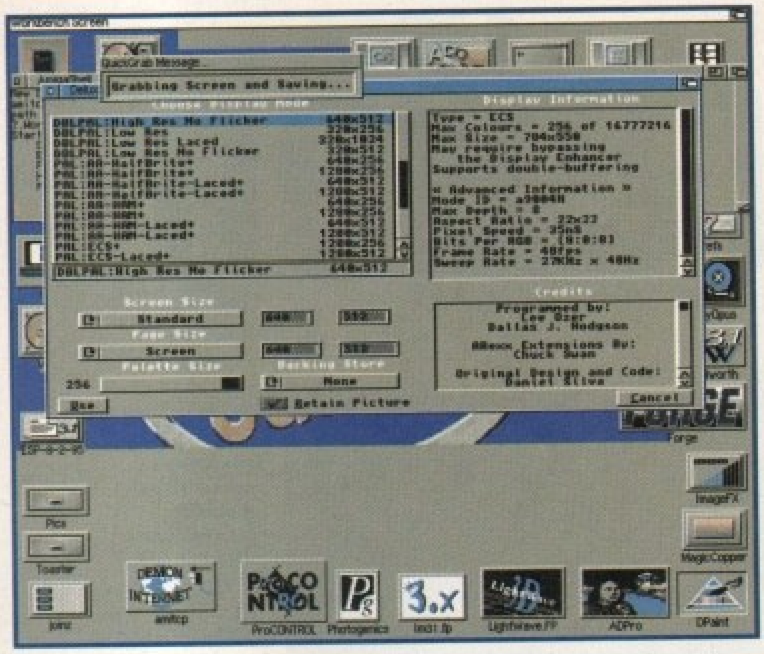


Light fabric

Memory management

The instructions say that to get the most out of Deluxe Paint 5, it's best to have 4Mb of RAM or more. The absolute minimum you can have is 2Mb of RAM – in all honesty, this simply isn't accurate. When using the likes of the camera movement option in the animation section with a hi-res detailed picture, to even generate five frames of movement on a full screen image produces a 'not enough memory' message. And that's on a 4000 with 16 megs of RAM.

While using higher resolutions is always going to eat up the memory, for professional uses hi-res is absolutely essential – no client is going to fancy watching the logo for their new company in low resolution. With this in mind, I'd say the absolute minimum for animation work is 4Mb, with a recommended amount being in the 8 meg region.



The screen mode requester provides you with a substantial amount of screen options with a detailed analysis of each. Try as hard as I could, I couldn't get the half-brite mode to work though

➤

manipulated, tilted and moved via the numeric pad 4 and then, with a press of the return key, whatever changes have been made are recorded and become the key frame for the animation. All numerical inputsare automatically updated by the computer.

This approach makes the whole process so much easier and removes any frustration at having to do it numerically through interfaces. Add to this the slow in and out options when an animated object comes to the end of its path and you have the potential for creating some very flowing moving images without any hassle.

For perfectionists out there, once the animation has been 'rendered' you're able to play the piece back and, if your computer can't maintain a specified animation rate, a speedometer can be called up at any point while it's running to provide you with an estimated animation rate. A small but useful idea. It's now possible to edit, create, load and save multiple palette animations, something that the likes of Brilliance boasted over DP4, and play them back in the improved DeluxePlayer that also allows anims to be played direct from the hard drive.

One of the most revolutionary ideas to be implemented is the camera movement. In the past, it's only been brushes that could be shot all over the screen but now you can have the 'camera' pan, zoom in and zoom out of a scene.

The process is as simple as animating a brush, with the same key framing routine and X, Y, Z co-ordinates. Two 'pages' are needed to create the likes of scrolling so that the computer can wrap round to create the illusion of a seamless routine.

GOOD AND BAD

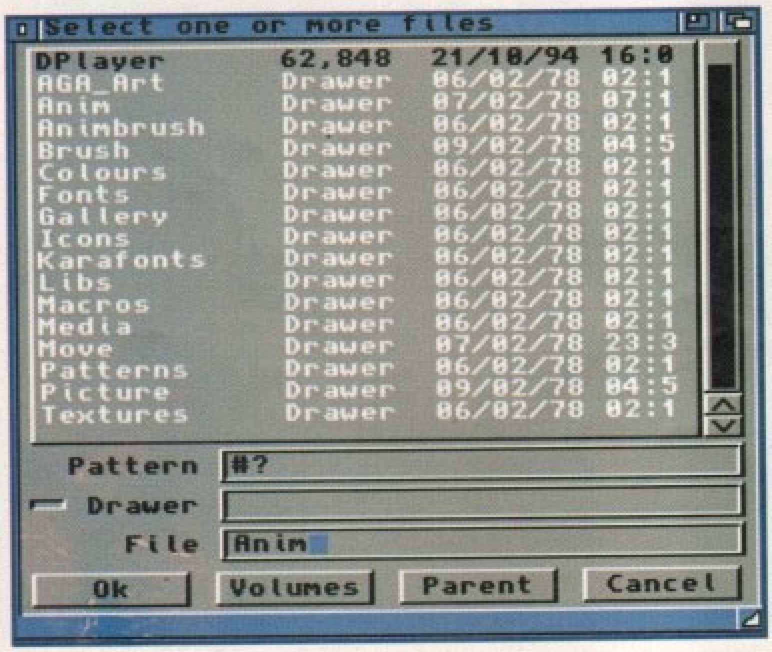
On the whole, the end results are rather good and I can imagine the facility being of real value for game's development, Scala presentations and the likes. Its only shortcomings are zooming right in, where everything becomes incredibly pixelised because it doesn't render each frame but simply uses the original. In turn, this affects the camera movement as it becomes horrifically jerky and slow.

The other bad point, which is perhaps understandable, is when using the cam movement in higher resolutions. Slap up a medium-sized logo and you'll be fine for moving and zooming in on, but if trying to move on a screen full of detailed graphics, no matter how much memory you have, you'll run out – the computer's chip RAM can't handle it. Other than these limitations, the camera movement is a welcome inclusion to DP5's range of features.

For those wanting to print their fine-tuned results, full printing options are available and include an animboard feature – this facility allows certain frames to be taken from an anim and printed out as a storyboard for reference work or for showing to clients.

An idea like this is invaluable for professional work. All these features add up to a very attractive proposition for animators who want a versatile 2D animation package.

The DeluxePlayer now comes with a variety of improvements. From displaying multi-paletted anims and playing them directly off the hard drive to providing full support for ARexx, the DeluxePlayer is still a handy addition to the Deluxe Painting package



Verdict

The rivalry between Deluxe Paint and Photogenics has the potential to become as full blown as the constant battle between Wordworth and Final Writer. Like the two word processors, it's a case of what you need the package for. While both boast extensive painting facilities for image making, when it comes to animation or image processing, neither shine in both departments.

Animators will have to stick with, and in most cases be very happy to have Deluxe Paint 5. There are faults with memory management and lack of speed but its painting facilities are smooth and easy to operate, gleaning convincing and in some cases rewarding results just from moving the watercolour brush over a light canvas background.

The main problem with the software is twofold – speed and lack of image processing tools. Photogenics on the other hand has these in an abundance but lacks any kind of animation facilities.

Perhaps some readers are sitting there shaking their heads and thinking these are two different packages for differing purposes. Correct in some ways, but if one of the enterprising companies involved could create an art package that encompasses all of the above, we could be looking at something exceptional and not just very good.

Until this happens, decide what you need – in both cases these are high calibre packages, with Photogenics just pipping the post for all-round professional excellence and sheer value for money.

SYSTEM ESSENTIALS

RED = Essential **BLACK** = Recommended

Any Amiga

2 Mb or more

4 Mb for 24-bit buffer editing

8 Mb

The bottom line

Product: Deluxe Paint 5
Supplier: All good Amiga retailers
Price: £89.99

Ease of use	9
Implementation	8
Value for money	8
Overall	9

Smarty Paints



You can customise SmartyPaints with ease, allowing you to create versions for your children to use

Have you finished doodling and scribbling with our exclusive and fully-working SmartyPaints CoverDisk? Do you want to find out about all the other features hidden away in this great art program?

If you do, send off for the SmartyPaints manual which describes all the features and drawing tools available to the Amiga artists.

As well as the printed manual, we are also throwing in a disk containing lots of kid clip-art for the youngsters. With this clip-art, your child can easily create their own pictures by simply pasting the pictures to the drawing screen.

SmartyPaints order form

Please send me:

SmartyPaints printed manual and kid clip-art disk for the princely sum of £8 (includes p&p)

Deliver to:

Name (Mr/Mrs/Ms/Miss)____________________

Address____________________

____

Postcode__________ Daytime phone__________

I wish to pay by:

☐ Cheque/postal order payable to IDG Media

☐ Credit card

Card No. ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ Expiry Date ☐ / ☐

Please allow 28 days for delivery while stocks last

☐ *Tick this box if you do not wish to receive promotional material from other companies*

SmartyPaints features

- Fully customisable to cater for all ages and abilities
- Sound effects to keep the kiddies interested
- Fully icon-driven interface for ease of use
- 15 drawing tools
- Comprehensive cut and paste editing tools
- Six different drawing modes
- Fast access keyboard shortcuts for many functions
- Supports multiple screens for Amigas with 2Mb or more

Current availability

I am a subscriber to your magazine and was reading the article entitled 'Straw pole' in January '95s ESP (issue 82). I was interested to read the first line which says that *Amiga Computing* is already available via the Internet. I would like to know in what way is it available. What services are currently accessible via the Internet and is it possible for me to access software, reviews etc? If so, how? Thanks for a great mag.

Gary Harris
garyh@ion.apana.org.au

Now this is what I'd call a timely letter. Although *Amiga Computing* has long been accessible on the Internet via our long-standing CIX account – amigacomputing@cix.compulink.co.uk. – we can also be accessed via our CompuServe account on 70007, 4734.

However, as you're obviously well aware, having full Internet access to *Amiga Computing* is what's really called for. And as luck would have it, that's exactly what will be available by the time you read this. *Amiga Computing* is proud to announce what we consider to be the best and most interactive Amiga magazine on the Internet.

Via our new *Amiga Computing* Homepage, anyone running a Web browser can fully interact with the magazine by mailing directly to ACAS, ESP, System and so on.

In addition, we'll be providing tasters and even full reviews of the latest hardware and software, plus highlights of the forthcoming issue and special Internet subscription offers. The only element that won't be available – yet – will be an *Amiga Computing*-specific FTP site. Watch this space.

To access our URL/Homepage, search for *Amiga Computing* from any main index. Next month we will publish our URL/Homepage address for you so you can access the information directly.



Price breaker?

I have just bought your January '95 issue and was intrigued by the CanDo CoverDisk. However, the upgrade schemes are overpriced and do not cater for the low-end market. I am a student and unable to pay the high price, but I would like to learn the package. Is there any way the manuals could be sold separately?

This will probably generate more profit for INOVAtronics, as I doubt the majority of users can, or will, upgrade through your magazine. Surely this will then apply to the Pareto effect of economics – that 80 per cent of the potential market will buy 20 per cent of their products. If more people wrote into you this might happen – you made a similar mistake with the Publisher CoverDisk by not catering for the mass market.

Ryan Morse
Milton Keynes

If only it was that simple. Unfortunately, you have a rather naive idea of how commercial CoverDisk give-aways actually operate. Although we can persuade a supplier to allow *Amiga Computing* to cover mount a particular product, we have no control whatsoever over the price for subsequent upgrades. Neither do we take a percentage if readers do indeed decide to upgrade.

In fact, the only part we play in the upgrade process is the provision of free pagination and design for the actual upgrade offer – which again is paid for by *Amiga Computing*. In reality, we invariably make a substantial loss on the deal, as a supplier will often demand payment for the product itself before they'll consider being a part of the initial promotion.

To be honest you're probably right – lower cost equals higher profits. But alas that's something which is out of our hands. Although we may distribute a product as a one-off, copyright and commercial decisions remain firmly in the hands of the supplier.

Fixing the fonts

We have an A500 with a 512k upgrade which is connected to an Integrex Colorjet Series 2 printer. If I type anything into the computer using any program (e.g. Kindwords) then change the size or style of the printing, the monitor screen shows exactly what I require but the printer will only print everything in the same size and style. Can you please tell me if I have a printer driver problem?

If this is the problem, would you be so good as to advise me on a possible solution. I would be obliged if you would give me information on how best to upgrade the A500, say to a 2Mb RAM for instance, and would any upgrade be worthwhile.

Please say a BIG thank you to all the staff of *Amiga Computing* for such an excellent magazine. I was so impressed I took out a subscription, so please keep up the good work.

B. Dixon
Co. Durham

Well you'll be glad to know there's probably a simple solution to your first

➤

Is anybody there?

I am writing to you in reference to B A Mills' letter in the February '95 issue about a Helm user group. I am a Helm user and purchased the program when it was released on the strength of two magazine reviews. I have had two disk-books reviewed in your magazine (History of the World Cup, and First-Aid Essentials) which I created with Helm and am currently working on a project to do with my job.

I have tried to get in contact with Eagle Tree Software about upgrades as I have found a couple of bugs in the version I have (1.44), but with no success. I am not even sure if they are still in business. I would be grateful if you would include my name on the Users list as the program deserves more than a slow death.

Gerard Fitzpatrick,
Republic of Ireland.

It appears you missed the March '95 issue, which features the latest 1.65 revision to the program. Just in case there's anyone out there who was caught in the same snow drift on the way to the newsagents, here's the details for any would-be upgraders or investors.

Product: Helm
Supplier: Eureka
Price: 99.95
Phone: 010 314637 0800

problem. It sounds like you haven't told the machine you want to use the Amiga fonts rather than the printer's own internal fonts.

To rectify the problem go to the printer set-up screen, which will probably appear as a button in the print requester. Once there, simply alter the settings from use printer fonts to use normal or internal fonts. The wording may vary, but the principle should remain the same.

As for your queries concerning A500 upgrades, you'll find a feature in the April issue which details a whole range of A500-specific accelerators, hard drives and RAM expansions which have just been released by Power Computing.

However, I'd strongly suggest you consider investing in an A1200, regardless of what you decide to do about upgrading your A500. If you're looking for long-term compatibility, an A1200 is increasingly becoming an essential for any dedicated Amiga fan.

Got something to say through the pages of AC? Ezra Surf is our mailman, dedicated to reading your letters and selecting the most interesting for publication. Drop him a line at:

Ezra Surf's Postbag, Amiga Computing Adlington Park, Macclesfield SK10 4NP

Please don't enclose saes as Ezra just hasn't got enough paper to reply personally. He might also have to shorten your letters, so don't be offended if you end up getting the chop.

Power to reply

I refer to your magazine's letters page in February '95s issue of *Amiga Computing* concerning a Mr C R Oldham of Manchester.

Mr. Oldham ordered a 200 Watt PSU and a 50mhz FPU from my company in August 1994. Power does not and never has stocked 200 Watt PSUs and this was a genuine error on my sales department side whom I can only presume misheard the order and sent the wrong product. A refund was issued within three weeks and not the two months that is stated in this letter.

As is common with other sellers of computer products, we do not issue refunds for computer chips or software as this can be copied, corrupted or mishandled. We will obviously exchange products if there is indeed a fault, but this was not the case (no fault was found by the company's technicians) and that is why a refund was initially refused – we were unable to return the product to Mr Oldham as he said he would refuse the item if it was sent back to him. However, it was decided for customer relations to refund this gentleman in full, another fact Mr Oldham omits to point out.

I do feel we should have been asked about this complaint first as it is clear the contents of Oldham's letter are untrue. Power Computing have a customer relations record second to none, and unsubstantiated complaints like this can give a completely wrong impression to a reader.

I would like to have your comments on this matter.

Tony Ianiri
Power Computing Ltd.

It's pretty obvious that there's been a breakdown of communications across the board. However, that doesn't excuse a lack of professionalism on our part. It's true that greater efforts should have been made to substantiate Mr Oldman's story.

However, I think even Power would agree the angle and tone of the reply to Mr Oldman's letter did more to defend Power's position and reputation than anything else.

Over recent months *Amiga Computing* has done more to champ ion the cause of the consumer than any other Amiga title. Obviously, in this case more care should have been taken, but I do feel we deserve some credit for defending the buying public in the face of a powerful financial lobby of the advertising community, while also being willing to except and learn from our mistakes.

Question time

I want to submit an article, as well as suggestions for subjects I'd be happy to provide articles on. My questions are as follows:

1. Do you accept submissions by e-mail? If so, to what address?
2. If sent snailmail, to which address should I mail submissions?
3. Do you want disks with the text in addition to printed copies?
4. If so, what format should the text be in (ASCII)?
5. Do you have any guidelines for submissions? (maximum line length, maximum and minimum number of words etc...)

Vidar Horstad
vidarh@ifi.uio.no

Okay, first of all we're more than happy to receive e-mail submissions. In fact, e-mail is increasingly becoming the norm for almost all our freelance material. As for *Amiga Computing*'s e-mail address, you'll find a complete list of our assorted e-mail addresses in reply to the opening letter in this very column.

If anyone prefers to submit articles by post, it's essential it is supplied on disk, and as you sugges ted, it's also vital that the file is provided in the ASCII file format.

However, it doesn't stop there. Any submission must also be accompanied with a collection of screen grabs and demo images – where applicable – with on average three images per page. Each of these must be accompanied by an appropriate caption.

As for word count, *Amiga Computing* usually operates on 900 words per page – so multiplying this figure will roughly equal the required word count.

However, it must be stressed that any unsolicited editorial will only be paid for if, and only if it appears in print. So be warned! However, if you do fancy your chances as a freelancer, please feel free to give it a go. Our editor is always open to new ideas.

A friendly offer

Having read the article on page 13 of the February '95 issue 'Stop Phoning', it would appear there are quite a few Amiga users out there who would like a copy of your CoverDisk which contains InfoFile.

I have the CoverDisk, and if you are agreeable am prepared to supply a complete copy of the disk for £1 to cover the cost of the floppy, plus post and packaging. I will undertake to supply the copies by return of post ASAP.

Mr Johnson
Oxon

If you're interested in Mr Johnson's offer, address your letters to: Mr P Johnson, 67 Oakley Road, Chinnor, Oxon OX9 4HR

A helping ear!

I have only been using my Amiga 1200 for a year now and have tried reading numerous magazines. Out of all of them I prefer your magazine as it is easy to read and you give away some excellent disks.

However, I have encountered problems on two of your disks, Easy Amos and Anim Workshop. These, I think, could have been cleared up in a matter of minutes but instead I have to write in with the problem and wait for a reply.

Why don't you have a Helpline so that you could make things easier for everyone. This is the only reason I have not subscribed to your magazine. Please consider this...

Brian Goodfellow
Northumberland

In the past *Amiga Computing* ran a CoverDisk helpline as a permanent feature. However, over recent months we've been running without a full-time CoverDisk editor and unfortunately, until this situation is resolved I'm afraid the CoverDisk helpline will remain inactive.

However, when a replacement is found, rest assured the helpline will be reactivated. If anyone out there is interested in the job feel free to send an application. Please mark your letter RE: CoverDisk Editor Application.

Printing power

I am looking for an easy-to-use spreadsheet which has good output on a inkjet printer. Any suggestions ?

Nicolai R. Axelsen
Norway

Just the way I like a letter. Short, sweet and to the point. Although there are a number of home office/spreadsheet combinations, my personal favourite is Maxiplan4. However, I strongly suggest you pop back to the contents page and take a close look at our home office round-up for a slightly less biased opinion on the subject.

Next Day **£5.00**
2-3 Days **£2.50** Saturday **£10.00**
Deliveries are subject to stock availability
Allow up to 7 days for cheques to clear

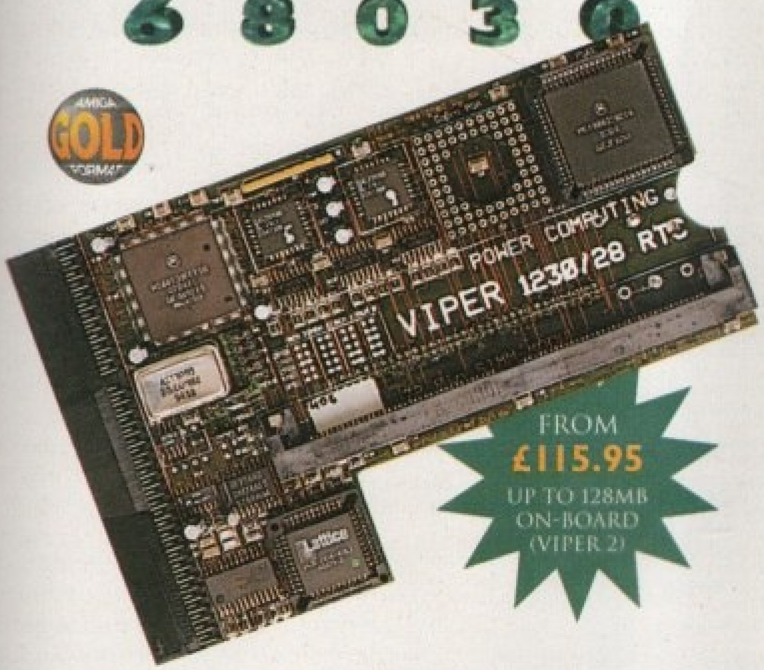
VISA

POWER

TELEPHONE **01234 273000**

POWER COMPUTING LTD
44a/b Stanley St. Bedford MK41 7RW
Tel **01234 273000** Fax **01234 352207**

VIPER 68030



FROM **£115.95** UP TO 128MB ON-BOARD (VIPER 2)

VIPER 68030 SERIES

- RAM Up to 8MB (Viper 1)/128MB (Viper 2)
- Full Kickstart Remapping
- Optional SCSI-II adaptor
- On-board battery backed clock/68882 Co-processor
- Instruction and data burst modes

Viper -1 28MHz		Viper -1 33-42MHz	
PGA/PLCC, FPU upto 50MHz		PGA/PLCC, FPU upto 50MHz	
Bare Board	£115.95	Bare Board	£169.95
4MB Viper	£249.95	4MB Viper	£299.95
8MB Viper	£399.95	8MB Viper	£439.95

Viper -2 28MHz		Viper -2 40MHz EC	
PLCC only, FPU upto 40MHz		PLCC only, FPU upto 40MHz	
Bare Board	£135.95	Bare Board	£199.95
4MB Viper	£269.95	4MB Viper	£329.95
8MB Viper	£419.95	8MB Viper	£469.95

Viper Co-processors		Viper Options	
28MHz FPU	£25	SCSI-II Adaptor	£79
33MHz FPU	£50	4MB SIMM	£139
40MHz FPU	£70	8MB SIMM	£299
50MHz FPU (PGA)	£100	Other SIMMS	£POA

Complete with Crystal, Blizzard Board compatible

VIPER 68030

68030 40MHz RC or 50MHz RC with MMU, RAM upto 128MB, FPU-PGA only.

Bare 40MHz	£229.00
40MHz-4MB	£379.00
40MHz-8MB	£499.00
Bare 50MHz	£249.00
50MHz-4MB	£399.00
50MHz-8MB	£519.00

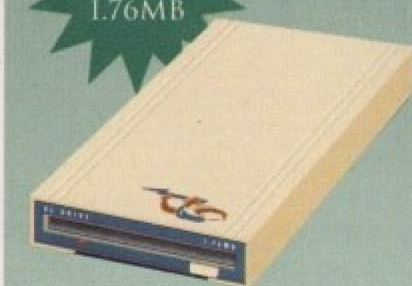
POWER 1208

- A1200 RAM board
- PCMCIA friendly
- Uses 1 x 32 SIMM
- Amiga Format Gold award
- Expand upto 8MB

2MB	£139.00
4MB	£189.00
8MB	£329.00

XL 1.76MB

£59.95 STORE 1.76MB

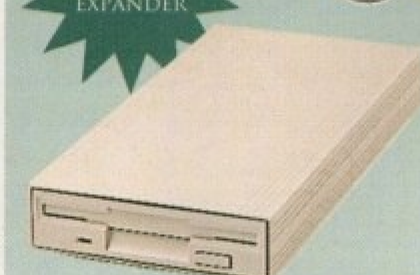


The XL Drive 1.76MB measures half the height of a standard external floppy drive and allows you to store a massive 1.76MB on a high density disk. The A4000 internal drive fits perfectly underneath the original drive and no case cutting is required.

EXTERNAL	£59.95
INTERNAL	£55.95
A4000 INT.	£55.95

POWER DRIVE

£49.95 INC. FLOPPY EXPANDER



The Power Drive now includes Blitz Amiga and Floppy Expander, free. Floppy Expander allows you to compress files on floppy disks by up to 50%. Other features include: Anti-Click, Anti-Virus, Isolation Switch, 2 Year Warranty, Thru'port, Cyclone Compatible Chip, Backup Hardware and Blitz Compatible feature.

BLUE CHIP AWARD

EXTERNAL	£49.95
CYCLONE S/W ONLY	£10.00

INTERNAL DRIVES

£30.95 A500 INTERNAL



Our internal drives use the same drive mechanisms as the Amiga to ensure complete compatibility.

PC881 A500	£30.95
PC882 A2000	£30.95
PC883 A600/1200	£35.95

All products have a 12 month warranty unless otherwise specified

Trade and Educational orders welcome - Worldwide distribution available

E.M.COMPUTERGRAPHIC

THE U.K.'S NUMBER 1 AMIGA FONT AND CLIPART DISTRIBUTORS - AMIGA COMPUTING ISSUE 52

BITMAPPED CLIP ART

Fully sorted/saved as brushes, ready for import into your programs.

EMC Volume 1 - 5 Disks - £14.00 - Classic *IFF Clipart*
Sports, Cartoons, Military, Animals, Transport, People and Xmas.
EMC Volume 11 - 5 Disks - £14.00 - Classic *IFF Clipart*
People, Food, Aircraft, Animals, Cats/Dogs, Sport, Transport etc..
EMC Volume 15 - 8 Disks - £22.00 - Classic *IFF Clipart*
Electronics, Kids, Sports, Animals, Religion, Office, Food and more!
EMC Volume 22 - 5 Disks - £14.00 - Classic *IFF Clipart*
People, Sports, Medical, Animals, Computers, Office and lots more!
EMC Volume 28 - 5 Disks - £14.00 - Classic *IFF Clipart*
Animals, Xmas, Cats, Computers, Headers/Borders & Seasons.

VERY HIGH QUALITY IFF CLIP ART

Extremely large clipart which produces printouts of amazing quality. IFF format and compatable with ALL major applications.
We recommend that you have at least 2mb of memory to use these images!

EMC Volume 34 - 5 Disks - £14.00 - ***IFF Animals 1***
Bears, Birds, Dogs, Water, Insects, Horses, Reptiles and Exotic.
EMC Volume 35 - 5 Disks - £14.00 - ***IFF Animals 2***
Cats, Wild Cats, Funny Cats, Trop.Fish, Fish, Farm and Funny.
EMC Volume 36 - 8 Disks - £22.00 - ***IFF Transport***
Just about everything from Aircraft to Boats and Cars to Trains.
EMC Volume 37 - 5 Disks - £14.00 - ***IFF Business***
Computers, Office, Bus.People, Printers and Funny Business.
EMC Volume 38 - 5 Disks - £14.00 - ***IFF Fantasy 1***
Barbarians, Beasts, Knights, Weapons, Dragons, Men & Women.
EMC Volume 39 - 5 Disks - £14.00 - ***IFF Fantasy 2***
Demons, Devils, Monsters, Skulls, Witches & Wizards etc..
EMC Volume 40 - 5 Disks - £14.00 - ***IFF Borders***
Stunning Borders - Animals, Women, Objects and Natural etc..
EMC Volume 41 - 6 Disks - £16.50 - ***IFF People 1***
Babies, Kids, Men, Women, Working, Families, Famous People.
EMC Volume 42 - 5 Disks - £14.00 - ***IFF Natural***
Plants, Flowers, Tropical Plants, Trees and Garden Plants.
EMC Volume 43 - 5 Disks - £14.00 - ***IFF Sports***
Gymnastics, Motor, Tennis, Golf, Water, Ball Games etc.
EMC Volume 44 - 6 Disks - £16.50 - ***IFF Education 1***
Bibles, School, Churches, Christ, Priests, History and Places.
EMC Volume 45 - 5 Disks - £14.00 - ***IFF Various 1***
Food, Easter, Xmas&Borders, Valentines, Sleighs and Wreaths.
EMC Volume 46 - 5 Disks - £14.00 - ***IFF Various 2***
Buildings, Dancing, Music, Rescue, Zodiac and Survival etc..
EMC Volume 47 - 5 Disks - £14.00 - ***IFF Humour***
Animals, Chickens, Idiots, People, Fruit, Kids, Dentists and Fish.
EMC Volume 50 - 6 Disks - £16.50 - ***IFF Dogs/Cats***
Just about every breed of Dog & Cat, inc. Wild Dogs & Cats.
EMC Volume 51 - 5 Disks - £14.00 - ***IFF Birds/Insects***
Eagles, Owls, Parrots, Common, Flies, Bugs, Bees and Spiders.
EMC Volume 52 - 5 Disks - £14.00 - ***IFF Animals 3***
Beavers, Gerbils, Hamsters, Deers, Farm Horses and Rabbits.
EMC Volume 53 - 5 Disks - £14.00 - ***IFF Animals 4***
Frogs, Snakes, Trop.Fish, Sea/Freshwater Fish, Insects etc..
EMC Volume 54 - 5 Disks - £14.00 - ***IFF Animals 5***
Apes, Elephants, Giraffes, Zebras, Bears, Teddy Bears etc.
EMC Volume 55 - 6 Disks - £16.50 - ***IFF Flowers 1***
Daffs, Flowering Plants, Chrys, Iris, Marigolds, Orchids, Lilies etc..
EMC Volume 56 - 6 Disks - £16.50 - ***IFF Flowers 2***
Poppies, Flowers & lots more flowers!
EMC Volume 57 - 6 Disks - £16.50 - ***IFF Flowers 3***
Petunias, Tulips, Flowers and lots more Flowers
EMC Volume 58 - 6 Disks - £16.50 - ***IFF Trees***
Humorous, Oak, Pine, Maple, Willows, Palms, Bonsai etc.
EMC Volume 59 - 6 Disks - £16.50 - ***IFF Plants1***
Bamboo, Pot Plants, Cacti, Yucca, Bulrushes, Thistles etc..
EMC Volume 60 - 6 Disks - £16.50 - ***IFF Plants 2***
Herbs, Food related plants and lots of other plants!
EMC Volume 61 - 6 Disks - £16.50 - ***IFF Military***
Aircraft, WWII Planes, Fighters, Tanks, Ships and lots more!
EMC Volume 62 - 5 Disks - £14.00 - ***IFF Fruit***
Apples, Grapes, R'berries, S'berries, Cherries, Pears etc..
EMC Volume 63 - 5 Disks - £14.00 - ***IFF People 2***
Babies, Kids, Kid's Stuff, Men, Cowboys, Famous etc..
EMC Volume 64 - 5 Disks - £14.00 - ***IFF People 3***
Circus, Historic, Borders, Beauty, Lingerie, Hairdressing etc.
EMC Volume 65 - 6 Disks - £16.50 - ***IFF Events***
B'day, Easter, Halloween, Xmas and nearly 2mb of Wedding.
EMC Volume 66 - 6 Disks - £16.50 - ***IFF Work***
Garden/Precision/Common Tools, Working Men, Machinery etc..
EMC Volume 67 - 6 Disks - £16.50 - ***IFF Food 1***
Italian, BBQ, Sweets/Puddings, Junkfood, Chefs/Waiters, Vegs.
EMC Volume 68 - 6 Disks - £16.50 - ***IFF Food 2***
Salad, Mushrooms, Sweetcorn, Wine, Champagne etc..
EMC Volume 69 - 5 Disks - £14.00 - ***IFF Science***
Doctors, Anatomy, Dentists, Medical Equip, Nurses etc..
EMC Volume 70 - 5 Disks - £14.00 - ***IFF Education 2***
Books, Teachers, Religion, Music/Instruments, Dancing and more!
EMC Volume 71 - 6 Disks - £16.50 - ***IFF Geography***
World Pics. - Asia, Egypt, Africa, Europe, India, Arabic etc..
EMC Volume 72 - 5 Disks - £14.00 - ***IFF Various 3***
Boats, Off Road, Italian/German Cars, Buses, Trains, Aircraft etc..
EMC Volume 73 - 5 Disks - £14.00 - ***IFF Various 4***
Castles, Houses, Cartoons and lots more!
EMC Volume 74 - 5 Disks - £14.00 - ***IFF Various 5***
Office Equip., Clothing, Computers, Electrics, Office Borders etc.
EMC Volume 75 - 5 Disks - £14.00 - ***IFF Various 6***
Soccer, Hunting, Fishing, Martial Arts, Flowers and lots more!
EMC Volume 76 - 5 Disks - £14.00 - ***IFF Various 7***
Masks, Household, Fantasy, English Stuff, Footwear and more!
EMC Volume 162- 6 Disks - £16.50 - ***IFF KidsArt***
Artwork by Kids for Kids. Ideal for Nursurys and Playgroups!
EMC Volume 163- 6 Disks - £16.50 - ***IFF Sports 2***
Cricket, Exercise, Martial Arts, Skiing, Rugby and lots more!
EMC Volume 164- 6 Disks - £16.50 - ***IFF Sports 3***
Football, Fishing, Ice Hockey, TPBowling, Snooker & Windsurfing
EMC Volume 165- 6 Disks - £16.50 - ***IFF Animals 6***
Jungle, Birds, Horses, Fish, Farm, Cats (all types) and lots more!
EMC Volume 166- 5 Disks - £14.00 - ***IFF Maps 1***
European Countries, S.American, Middle East, West Indies etc..
EMC Volume 167- 5 Disks - £14.00 - ***IFF Maps 2***
African, Asian, America (and States) and other Countries.
EMC Volume 168- 6 Disks - £16.50 - ***IFF Various8***
Houses, Elec. appliances and lots of Wood/Metalworking Tools!
EMC Volume 169- 6 Disks - £16.50 - ***IFF Various9***
Events, XMas, Working People, Cars, Gardening, Transport etc..
EMC Volume 170- 6 Disks - £16.50 - ***IFF Various10***
2mb+ of Borders, Furniture, Food, Places, Toys & LOTS of Trains
EMC Volume 171- 6 Disks - £16.50 - ***IFF Various11***
Cameras, Cowboys, Kids & lots of Business & Computer Logos.
EMC Volume 172- 6 Disks - £16.50 - ***IFF Various12***
Medical, Statues, Insects, Maps and lots of Misc. People Bits!

OTHER FONTS AND CLIPART

EMC Vol 3 - 2 Disks - £ 6.00 - ***Pagestream Fonts***
34 Pagestream format fonts, compatible with all program versions.
EMC Vol 18 - 5 Disks - £16.50 - **60 *PDraw Fonts***
EMC Vol 19 - 5 Disks - £16.50 - **63 *PDraw Fonts***
EMC Vol 20 - 5 Disks - £16.50 - **50 *PDraw Fonts***
EMC Vol 48 - 5 Disks - £14.00 - ***ColorFonts***
54 4,8 and 16 color fonts for DPaint, Scala, Opalvision etc..
EMC Vol 49 - 5 Disks - £14.00 - ***ColorFonts***
63 4,8 and 16 color fonts for DPaint, Scala, Opalvision etc..

For Pagestream and Wordworth 3 users;

EMC Vol 2 - 6 Disks - £16.50 - ***PC ClipArt***
.gem structured/.img clipart. Computers, Borders and lots more!
EMC Vol 21 - 6 Disks - £16.50 - ***PCX Clipart***
Animals, Cartoons, Computers, Sports etc.
EMC Vol 32 - 6 Disks - £16.50 - ***IMG ClipArt***
Animals, Food, Cartoons, Plants and Drinks.
EMC Vol 33 - 6 Disks - £16.50 - ***IMG ClipArt***
People, XMas, Buildings, Sports and Transport.

Opalvision 2.3b Update Disks £6.99

256 IFF COLOUR GRAPHICS FOR AGA AND 24 BIT AMIGAS

IFF256 format pics that will load directly into any 24 bit or AGA application, such as Dpaint 4.5, Opalvision, ADPro etc. You can also use these pics as WB backdrops on A1200/A4000's.

EMC Volume 88 - 6 Disks - £16.50 - ***256 Cars 1***
Ferraris, Corvette, Mercs, Formula 1, Sports Cars and more!
EMC Volume 89 - 6 Disks - £16.50 - ***256 Cars 2***
Porches, Lambos, Classic, E-Type, and US Sports Cars.
EMC Volume 90 - 6 Disks - £16.50 - ***256 Planes 1***
Falcons, Spitfire, Bombers, F-14's, Tomcats and more!
EMC Volume 91 - 6 Disks - £16.50 - ***256 Planes 2***
F-15's, F-16's, Harrier, B17's, Stealth Bombers and more!
EMC Volume 92 - 5 Disks - £14.00 - ***256 Space 1***
The Earth , NASA Space Shots, Lots of Planets and more!
EMC Volume 93 - 5 Disks - £14.00 - ***256 Space 2***
Enterprises, Space Shuttles, NASA Shots and more!
EMC Volume 94 - 5 Disks - £14.00 - ***256 Women***
Lots of Beautiful Women and Models
EMC Volume 95 - 5 Disks - £14.00 - ***256 WildCats***
Lions, Tigers, Leopards and lots of other WildCats!
EMC Volume 96 - 6 Disks - £16.50 - ***256 Horses 1***
Running Horses, Foals, Rodeo Horses and more horses!
EMC Volume 97 - 6 Disks - £16.50 - ***256 Horses 2***
Horses in the snow, Horses on the beach and more Horses!
EMC Volume 98 - 5 Disks - £14.00 - ***256 Dogs 1***
Alsation, Labrador, Cute puppies and even some ugly ones!
EMC Volume 99 - 5 Disks - £14.00 - ***256 Dogs 2***
Setters, Cute Dogs with Cats, Cute Puppies and more!
EMC Volume 100 - 6 Disks - £16.50 - ***256 Cats 1***
Really cute and humorous pictures of Cats and Kittens!
EMC Volume 101 - 6 Disks - £16.50 - ***256 Cats 2***
More really cute and humorous pictures of Cats and Kittens!
EMC Volume 102 - 6 Disks - £16.50 - ***256 WaterLife***
Dolphins, Whales, Frogs, Fish, GoldFish and lots more!
EMC Volume 103 - 6 Disks - £16.50 - ***256 Sun & Sea***
Just about everything from Tropical Islands to Sandy Beaches.
EMC Volume 104 - 6 Disks - £16.50 - ***256 Animals 1***
Pandas, Deers, Bears (all types), Zebras and lots more!
EMC Volume 105 - 6 Disks - £16.50 - ***256 Animals 2***
Elephants, Gorillas, Chimps, Monkeys, Seals, Koalas and more!
EMC Volume 106 - 6 Disks - £16.50 - ***256 Animals 3***
Wolves, Moose, Cougar, Kangaroo, Fox Pups and lots more!
EMC Volume 107 - 6 Disks - £16.50 - ***256 Animals 4***
Lizard, Squirrels, Walrus, Kittens and lots of Other Animals.
EMC Volume 108 - 6 Disks - £16.50 - ***256 Panorama 1***
Forests, Mountain Rivers/Lakes, Waterfalls, Rainbows and more.
EMC Volume 109 - 6 Disks - £16.50 - ***256 Panorama 2***
Snow Topped Mountians, MountianLakes, Waterfalls, Streams etc.
EMC Volume 110 - 6 Disks - £16.50 - ***256 Panorama 3***
Rolling Hills, Snow Scenes, Farms, Small Harbour, and Lots more!
EMC Volume 111 - 6 Disks - £16.50 - ***256 The Sun***
Sunrises and Sunsets from Cities to Lakes to Deserts!
EMC Volume 112 - 5 Disks - £14.00 - ***256 World People***
American/Amazon Indians, Hawaiians, Africans and more!
EMC Volume 113 - 6 Disks - £16.50 - ***256 America***
Grand Canyon, Vegas, CeasarsPalace, White House etc.
EMC Volume 114 - 6 Disks - £16.50 - ***256 Castles***
Castles with Moats, Castles on Mountains, Castles on Rivers etc..
EMC Volume 115 - 6 Disks - £16.50 - ***256 The World***
From around the world - Egypt, Japan, Italy, France, England etc.
EMC Volume 116 - 5 Disks - £14.00 - ***256 Birds 1***
Parrots, Humming Birds, Flamingos, and lots more Birds!
EMC Volume 117 - 5 Disks - £14.00 - ***256 Birds 2***
Ducks, Eagles, Hawks, Owls, Winter Birds and more Birds!
EMC Volume 118 - 5 Disks - £14.00 - ***256 Birds 3***
Swans, Falcons and lots of birds that we can't identify!
EMC Volume 119 - 6 Disks - £16.50 - ***256 Fantasy 1***
Warriors, Dragons, Female Warriors and lots more!
EMC Volume 120 - 6 Disks - £16.50 - ***256 Fantasy 2***
Dragon Lance pics, Dracula, Skull Warriors and lots more!
EMC Volume 121 - 6 Disks - £16.50 - ***256 The Movies***
Batman, Starwars, Top Gun, Terminator, Indy, Karate Kid etc..
EMC Volume 122 - 5 Disks - £14.00 - ***256 Renders 1***
Rendered Dragons, Glasshouse, Medcedes cars and more!
EMC Volume 123 - 5 Disks - £14.00 - ***256 Renders 2***
Rendered Bugs, Chess Boards, Various Rooms, F-18 and more!
EMC Volume 124 - 5 Disks - £14.00 - ***256 Renders 3***
Rendered kitchens, Bowling, Insects, Cameras and more!
EMC Volume 125 - 5 Disks - £14.00 - ***256 Girls 1***
Beautiful Women dressed in very little...Blood boiling!
EMC Volume 126 - 5 Disks - £14.00 - ***256 Girls 2***
Beautiful Women dressed in very little...Blood boiling!
EMC Volume 127 - 5 Disks - £14.00 - ***256 Girls 3***
Beautiful Women dressed in very little...Blood boiling!
EMC Volume 128 - 6 Disks - £16.50 - ***256 Water Girls***
Beautiful Women under Waterfalls, at the Pool and very wet!
EMC Volume 129 - 5 Disks - £14.00 - ***256 Swim Suits***
Beautiful Women, of all shapes and sizes, in Swimsuits.
EMC Volume 130 - 5 Disks - £14.00 - ***256 Bikinis***
Beautiful Women, of all shapes and sizes, in Bikinis
EMC Volume 131 - 5 Disks - £14.00 - ***256 Beach Girls***
Women on the beach, the kind of babes you see in Baywatch!
EMC Volume 132 - 5 Disks - £14.00 - ***256 Lingerie***
Beautiful Women, of all shapes and sizes, in Lingerie.
EMC Volume 133 - 5 Disks - £14.00 - ***256 Star Trek***
High quality pictures of the NCC1701, TNG/ TOS characters etc..
EMC Volume 134 - 5 Disks - £14.00 - ***256 Various 1***
Mixture of pics. mainly of Women & Fantasy...Starter volume!?
EMC Volume 135 - 5 Disks - £14.00 - ***256 Reptiles***
Snakes, Frogs, Lizards, Crocs and some amazing pics of Dinos.
EMC Volume 136 - 6 Disks - £16.50 - ***256 Classic Cars***
6 disks packed with Classic cars of all shapes and sizes.
EMC Volume 137 - 6 Disks - £16.50 - ***256 Cars 3***
Vettes, Porches, Aston, Countachs, E-Type, Mini, RR, Esprit etc..
EMC Volume 138 - 6 Disks - £16.50 - ***256 Fast Cars***
Testas, F-40's, Countachs, Porches, Lotus and lots more!
EMC Volume 139 - 6 Disks - £16.50 - ***256 Racing***
6 disks full of Indy Racing, Formula 1, Drag Racing and more!
EMC Volume 140 - 6 Disks - £16.50 - ***256 Boats***
Power, Yachts, Military and just about every other type of boat!
EMC Volume 141 - 5 Disks - £14.00 - ***256 Trains 1***
1st of our 256 Train vols. containing Steam and Electic locos!
EMC Volume 142 - 5 Disks - £14.00 - ***256 Trains 2***
2nd of our 256 Train vols. containing Steam and Electic locos!
EMC Volume 143 - 5 Disks - £14.00 - ***256 Trains 3***
3rd of our 256 Train vols. containing Steam and Electic locos!
EMC Volume 144 - 5 Disks - £14.00 - ***256 Trains 4***
4th of 256 Train vols. containing Steam and Electic locos!
EMC Volume 145 - 6 Disks - £16.50 - ***256 Military***
Desert Storm, Tanks, Bombs, Jets, Cannons, Navel and more!
EMC Volume 146 - 6 Disks - £16.50 - ***256 Flight***
Planes, H'copters, LightPlanes and stunning pics. of Hot Air balloons.

MORE 256 IFF COLOUR GRAPHICS FOR AGA AND 24 BIT AMIGAS

EMC Volume 147 - 6 Disks - £16.50 - ***256 Jet Fighters***
F-117's, Phantoms, F-16 Falcons, Aircraft Carriers and lots more!
EMC Volume 148 - 6 Disks - £16.50 - ***256 Snow Scenes***
Spectacular pics. of Snow Capped M'tains, Snowy Forests & Rivers.
EMC Volume 149 - 6 Disks - £16.50 - ***256 WaterLife 2***
Colourful pics. of Tropical Fish, Coral, StarFish and lots more!
EMC Volume 150 - 6 Disks - £16.50 - ***256 Travel***
Stonehenge, KingTut (Stunning), G.Canyon, Collesium and more!
EMC Volume 151 - 5 Disks - £14.00 - ***256 NASA 1***
A'nauts, Shuttles, Planets, Lunar Modules and Hubble T'scope etc.
EMC Volume 152 - 5 Disks - £14.00 - ***256 NASA 2***
Shuttles, S'lites, Launch Sites, Launchs and lots of Space Shots!
EMC Volume 153 - 6 Disks - £16.50 - ***256 Babes 1***
Due to overwhelming demand...yet more disks of Beautiful Babes!
EMC Volume 154 - 6 Disks - £16.50 - ***256 Babes 2***
Due to overwhelming demand...yet more disks of Beautiful Babes!
EMC Volume 155 - 6 Disks - £16.50 - ***256 Babes 3***
Due to overwhelming demand...yet more disks of Beautiful Babes!
EMC Volume 156 - 6 Disks - £16.50 - ***256 Babes 4***
Due to overwhelming demand...yet more disks of Beautiful Babes!
EMC Volume 157 - 6 Disks - £16.50 - ***256 Babes 5***
Due to overwhelming demand...yet more disks of Beautiful Babes!
EMC Volume 158 - 6 Disks - £16.50 - ***256 Hunks***
One for the Girls - 6 disks of 'Chippendale' type Hunky men!
EMC Volume 159 - 6 Disks - £16.50 - ***256 Various 2***
Pictures mainly comprising of Babes and Wild Cats.
EMC Volume 160 - 6 Disks - £16.50 - ***256 Various 3***
Famous People, Waterlife, Snow Scenes and Travel.
EMC Volume 161 - 6 Disks - £16.50 - ***256 Various 4***
Space, Hunks, Babes, Rock Stars and Famous People!
EMC Volume 208 - 6 Disks - £16.50 - ***256 Robots***
Some amazing high quality artwork of chrome plated female robots.
EMC Volume 209 - 6 Disks - £16.50 - ***256 Heavy Metal***
Very nice fantasy type artwork from Heavy Metal magazine.
EMC Volume 210 - 6 Disks - £16.50 - ***256 Star Wars***
Quality pictures and artwork from the Star Wars movies.
EMC Volume 211 - 6 Disks - £16.50 - ***256 Night Breed***
Quality pictures and artwork from the SciFi series - Night Breed.
EMC Volume 212 - 6 Disks - £16.50 - ***256 DS9 1***
Quality pictures and artwork from Star Trek - Deep Space Nine.
EMC Volume 213 - 6 Disks - £16.50 - ***256 DS9 2***
Quality pictures and artwork from Star Trek - Deep Space Nine.
EMC Volume 214 - 6 Disks - £16.50 - ***256 DS9 3***
Quality pictures and artwork from Star Trek - Deep Space Nine.
EMC Volume 215 - 6 Disks - £16.50 - ***256 DS9 4***
Quality pictures and artwork from Star Trek - Deep Space Nine.
EMC Volume 216 - 6 Disks - £16.50 - ***256 DS9 5***
Quality pictures and artwork from Star Trek - Deep Space Nine.
EMC Volume 217 - 6 Disks - £16.50 - ***256 TNG 1***
Quality pictures and artwork from Star Trek - The Next Generation.
EMC Volume 218 - 6 Disks - £16.50 - ***256 TNG 2***
Quality pictures and artwork from Star Trek - The Next Generation.
EMC Volume 219 - 6 Disks - £16.50 - ***256 TNG 3***
Quality pictures and artwork from Star Trek - The Next Generation.
EMC Volume 220 - 6 Disks - £16.50 - ***256 Star Trek 2***
Great pictures and artwork from Star Trek - Original series & Movies.
EMC Volume 221 - 6 Disks - £16.50 - ***256 Star Trek 3***
Great pictures and artwork from Star Trek - Original series & Movies.
EMC Volume 222 - 6 Disks - £16.50 - ***256 Conan***
Excellent 256 artwork featuring Conan the Barbarian.
EMC Volume 223 - 6 Disks - £16.50 - ***256 Dr Who***
Great pictures and excellent artwork from the cult series Dr Who.
EMC Volume 224 - 6 Disks - £16.50 - ***256 TV-SciFi***
This volume comprises of pictures and artwork from Blake 7 and "V"
EMC Volume 225 - 6 Disks - £16.50 - ***256 D.Lance 1***
Brilliant high quality artwork from Dragon Lance.
EMC Volume 226 - 6 Disks - £16.50 - ***256 D.Lance 2***
Brilliant high quality artwork from Dragon Lance.

Stunning artwork by the renowned fantasy artist Boris Vallejo

EMC Volume 227 - 6 Disks - £16.50 - ***256 BorisV 1***
EMC Volume 228 - 6 Disks - £16.50 - ***256 BorisV 2***
EMC Volume 229 - 6 Disks - £16.50 - ***256 BorisV 3***
EMC Volume 230 - 6 Disks - £16.50 - ***256 BorisV 4***
EMC Volume 231 - 6 Disks - £16.50 - ***256 BorisV 5***
EMC Volume 232 - 6 Disks - £16.50 - ***256 BorisV 6***
EMC Volume 233 - 6 Disks - £16.50 - ***256 BorisV 7***
EMC Volume 234 - 6 Disks - £16.50 - ***256 BorisV 8***

EMC Volume 235 - 6 Disks - £16.50 - ***256 Kelly 1***
Excellent artwork by the famous fantasy artist Ken Kelly.
EMC Volume 236 - 6 Disks - £16.50 - ***256 Kelly 2***
Excellent artwork by the famous fantasy artist Ken Kelly.
EMC Volume 237 - 6 Disks - £16.50 - ***256 SciFi Art 1***
Mixed bag of great artwork and pictures with a general SciFi theme.
EMC Volume 238 - 6 Disks - £16.50 - ***256 SciFi Art 2***
Mixed bag of great artwork and pictures with a general SciFi theme.
EMC Volume 239 - 6 Disks - £16.50 - ***256 Woodroffe***
Really good Weird fantasy pic.s from the world of Patrick Woodroffe
EMC Volume 240 - 6 Disks - £16.50 - ***256 Movies 2***
Excellent pics/artwork from films - DS9, Star Wars, Terminator, "V",
EMC Volume 241 - 6 Disks - £16.50 - ***256 D & D***
Stunning artwork with a Dungeons and Dragons theme.
EMC Volume 242 - 6 Disks - £16.50 - ***256 Fantasy 3***
Loads of good quality general fantasy artwork.

Spectacular artwork by the renowned fantasy artist Tim White

EMC Volume 243 - 6 Disks - £16.50 - ***256 White 1***
EMC Volume 244 - 6 Disks - £16.50 - ***256 White 2***
EMC Volume 245 - 6 Disks - £16.50 - ***256 White 3***

DISCOUNTS! DISCOUNTS! DISCOUNTS!

Do you want to save £1.50 on every EMC volume of disks you buy?...Yes!...we thought so!

When you buy any 2 EMC volumes you will qualify for a £3.00 discount, buy 3 volumes and you get £4.50 off! buy 4 volumes and you get £6.00 off!...and so on. Basically this means that if you purchase 2 or more volumes you can deduct £1.50 for EVERY volume of disks you order.

For example: If you would like to to order EMC volumes 48 and 103... The normal cost would be £30.50...Now it will only cost you £27.50!

NO CATCHES!...NO SNAGS!...NO SMALLPRINT!

ALL WE ASK IS THAT YOU QUOTE " **EMC - DISCOUNT** " ON ALL ORDERS

public sector



Dave Cusick surveys another diverse sackful of PD and shareware offerings

Spring is at last here and everything is alright in the world. An end to the long dark evenings is something in itself, but I reckon people are generally less depressed and more inclined to irrational prolonged periods of good temper at this time of year.

It was, therefore, with a smile on my face that I tore open this month's bundle of jiffy bags and spread the contents across the desk. Among them, unable to be squeezed into the spacially-challenged PD pages, were yet more programs whose title could be produced by rearranging the words 'Winner' and 'Lottery.' (Still, only four this month, so things are looking up).

Also in there, and thoroughly worthy of reviews had they not graced these pages but a few issues ago, were new versions of two top-quality products: The definitive Thrust clone, Roketz, and the cheapest and best image processing package around, ImageStudio, which at version 2.0 now supports ARexx and can outpace Image FX. But enough of my drooling. The question on everyone's lips is: Will any of the following join them as PD/shareware classics?

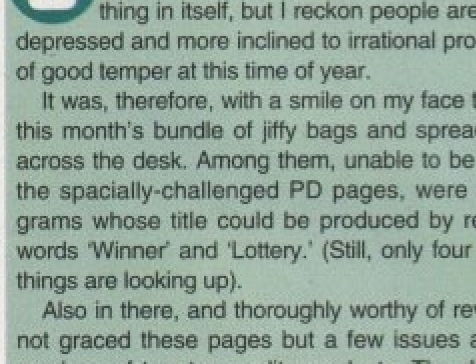
MovieZone #1

Edited by: Philip C Swales
Available from: Philip C Swales

This is the first issue of what, unsurprisingly, turns out to be a disk magazine dedicated to movies. First impressions are good, with attractive introductory screens giving way to a clear and lengthy index. This high standard is maintained in the readable and generally well written articles, all of which are neatly presented and free from irritating mistakes in spelling and grammar.

As one would expect, a few recent film releases are reviewed, including Forrest Gump, City Slickers 2, IT, and plenty more. But there's a great deal more to this magazine than simple reviews. Entertaining features on multiscreen cinemas, film censorship and TV language cuts, and even quizzes on some classic films.

It is refreshing to find such a professionally produced disk magazine covering an area so well. The only criticism I would have is that many of the articles are perhaps a little brief, although on balance this is made up for by the wealth of varied features present. The editor and contributors have done a marvellous job, and future issues of this diskmag should certainly be worth looking out for.



Live near Milton Keynes and want to find a decent cinema? Fear not, because among the MovieZone reviews there could be the answer to your prayers

Cyberman

Written by: Fabio Bizzetti
Available from: Freestyle PD

Here's a novel variation on an old theme. Cyberman is essentially Pacman in 3D, with the action unfolding in full first-person glory. The impressively smooth and colourful graphics combine with authentically bleepy sound effects to produce a beautifully presented game.

Roaming around the maze of dots are a loathsome bunch of computer foes: The Macintosh apple, the joypad, the Atari Fuji symbol, an Acorn, and an Empty Inside badge. Physical contact with these nasties is to be avoided at all costs. Fortunately, as ever, there are power pills dotted around the maze which temporarily make them vulnerable. Additionally, it is now possible to jump over the nasties or to turn around halfway along a pathway to flee. Nevertheless, avoiding them isn't always easy.

Cyberman is quite a tricky little chestnut and also very addictive. Part of the appeal may come from the challenge of trying to relate the 3D action to the conventional 2D maze map in the top right-hand corner of the screen, something which can prove harder than you might think. This is an attractive and polished game featuring engrossing arcade action, and is the sort of game that will entertain everybody.

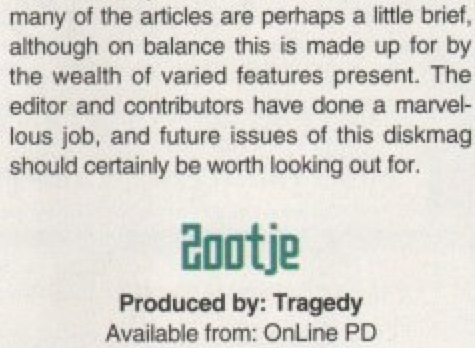


Meet some of Cyberman's enemies

Zootje

Produced by: Tragedy
Available from: OnLine PD
Disk No. OD28

I know it's pretty racist of me, but I've always found the Belgians a strange bunch. For example, they build motorways with tight bends and steep hills, have two languages and consequently two names for most of their cities, and will charge you for using their toilets. Still, I thought, slotting Zootje into the drive, I've probably got the wrong impression.



Beavis and Butthead in "They're not funny" shocker



For the first 30 seconds or so, Zootje actually looks like it might be a fairly normal demo

Fruit Salad

Written by: S Hayne
Available from: Cheetah PD

Typically jolly platform frolics are on offer in Fruit Salad, complete with compulsory garish graphics and tinkly tunes. Basically, the object of the game is to scuttle and leap around a series of screens filled with objects to collect and nasties to avoid. Once the collectables are, erm, collected, the background colours will start to cycle producing a rather mad psychedelic effect. A large red arrow will also appear, pointing the way to the next screen.

While on paper there doesn't seem to be a lot to Fruit Salad, in practice it presents a fairly tough challenge because after only the first couple of screens, things start to get hard.

Fruit Salad is hardly going to set the world on fire, but it's not a bad effort and there are plenty of far worse platformers about. The game is available from PD libraries but it is shareware, so those who play it are obliged to send the author a fiver. Registered users receive an enhanced version of Fruit Salad.

GAME of the MONTH



Munching through a maze takes on a whole new dimension in Cyberman

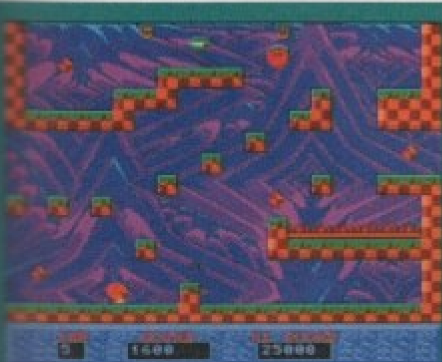
Belgians are probably perfectly sensible and normal people. Five minutes later I was surer than ever that Belgians are a peculiar breed.

Zootje is a demo, and I won't even attempt to guess what the title means in English. It's got decent enough music and graphics but the thing is, I can't understand why anybody would want to put together a two minute sequence featuring a headbanging ostrich.

It's not all ostriches, however – there is a brief interlude featuring the twosome the Radio Times is keen to describe as 'the heavy metal anti-heroes', Beavis and Butthead. I have to say that in all honesty, the term I would be keen to describe these two characters could not possibly be printed in a family magazine, but suffice it to say that the aptly named programmers Tragedy have got the cult MTV characters to a tee. As a consequence, if you're one of the distressingly large number of people who wander around mindlessly mumbling "Huh huh, that's like cool, and stuff" then you'll be in heaven.

More sane people might be impressed by the animation and crisp sound samples but will probably be eager to get back to the ostrich, and they won't be disappointed. After something of a repeat performance, our lone ostrich makes way for a looping animation of many things running along while the credits scroll up the screen.

At the end of the day, it's quite well done and I'm sure it's very nice if you are into this sort of thing. Be warned though; don't expect to understand why on earth anybody would produce such peculiar 'entertainment.'



Mindless platform fun by the cartload with Fruit Salad



Impeccable timing is required during this stage of Fruit Salad – and it's only the third screen

Dead Of Night

Produced by: Trecision
Available from: Freestyle PD

Despite suffering a little from some minor translation errors, this Italian murder mystery game is a pretty impressive effort. In a manner not entirely dissimilar from Delphine's Cruise For A Corpse, the plot finds several people together in an isolated location – in this instance a mountain chalet – where a murder has taken place. The victim, by the name of Diana, could have been killed by any one of the other eight individuals in residence. A good helping of pointy-clicky detective work is the order of the day here.



Diana stands at the chalet window, unaware of the fate that is about to befall her, in the brief but impressive introduction to Dead Of Night



Your room, from where you commence investigations in Dead Of Night

While the majority of the screen area is taken up with a well-drawn depiction of the current location, complete with any occupants, an inventory is also displayed in a strip across the bottom of the screen. When the right mouse button is pressed, an additional strip containing the options Close, Open, Take and Use appears. Actions are accomplished by moving the pointer to one of these options and releasing the button, then left clicking on the ➤

Calling all PD libraries...

...and individuals with absolutely any program, whatever its purpose, which you consider worthy of review. Whether it will be freely distributable public domain, shareware or licenceware, if it's of sufficient quality to merit coverage then stick it in a jiffy bag or padded envelope and send it in with all haste. I promise I'll at least look at your work. Please clearly label the disk, and include a cover letter supplying a description of the disk contents and some basic instructions. The address to send the disks to is:

Dave Cusick
PD submissions
Amiga Computing
Media House
Adlington Park
Macclesfield SK10 4NP

Tiny Toons Clip Art

Produced by: David Hearne
Available from: OnLine PD. Disk No. OF5



This selection of cartoon clip art covers themes and characters as varied as skateboarding ducks and Roadrunner. There are, in total, five coloured screens and 21 black and white screens, each filled with plenty of pictures.



Awww, look at the cutesy-wootsy wabbits! Screenfuls of similarly twee cartoon characters are on offer on the Tiny Toons Clip Art disk

The artwork (or it could be scanner-work, since it doesn't mention anywhere how the disk was produced) is of a high standard throughout.

Some of the characters appear to be original, although it has to be said, a fair few are famous cartoon stars, which it must be said raises a few questions about copyright. With this in mind it appears to definitely be a case of 'for personal use only.'

Still, even in this sort of limited role the pictures could well be worth getting hold of. The coloured screens, attractive as they are, might not really prove very useful, but the black and white screens are certainly of sufficient variety and quality for use by keen desktop publishers.



Attractive although slightly useless, the World Cup screen is one of five coloured pictures on the Tiny Toons disk

object to perform the action.

Graphics and sound are impressive – particularly the sampled sound effects which accompany many actions. Also, there's always plenty of depth in games of this ilk, so Dead Of Night is a fairly fine game on all counts. Although I haven't yet reached the message telling me that's as far as I can go, this is apparently a demo version. The full monty costs US $10 and is available from the authors.

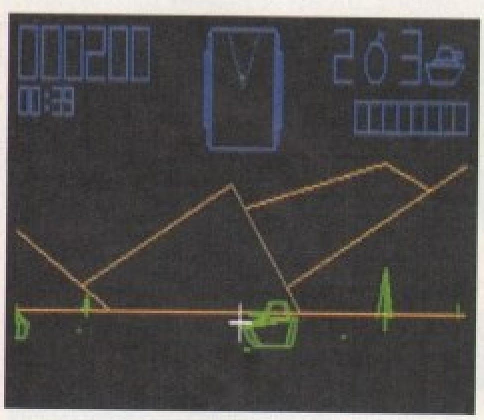
Magnetic Fields Tanks

Produced by: Magnetic Fields
Available from: OnLine PD
Disk No. OG87

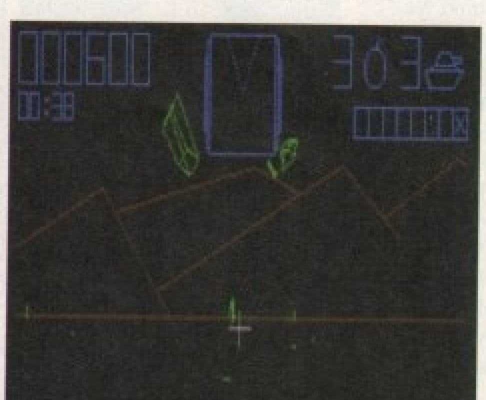
From the title screen logo it appears this is the same Magnetic Fields responsible for the hit Lotus games. This might just raise expectations a little, although it would hardly be fair to expect PD offering Tanks to compare with that classic arcade racing series. Approach MF Tanks as if it were any other PD disk and you'll find it to be a competent and enjoyable blaster.

Controlling your tank via the mouse, the objective is simply to seek out and destroy enemy tanks before they do the same to you. Hitting the left button fires, whereas the right button activates one of your three smart bombs, killing all enemies in the area. The scanner at the top of the screen is an invaluable aid as increasingly large numbers of enemy tanks close in.

The simple line graphics might not look too stunning but they contribute to a fast and smooth game. In fact, while Tanks is a very simplistic affair, it's actually quite entertaining for a while. Admittedly, after a bit it does start to drag, but it is the sort of thing you can whip out every now and again for a quick blast.



It might actually be called Tanks, but smooth action is very much the name of the game here



Imagine your worst enemy was in that exploding tank. Far from provoking aggression, computer games can relieve it

Mega Disk #2

Compiled by: Jonathan Fisher
Available from: Professional PD
Disk No. MG02

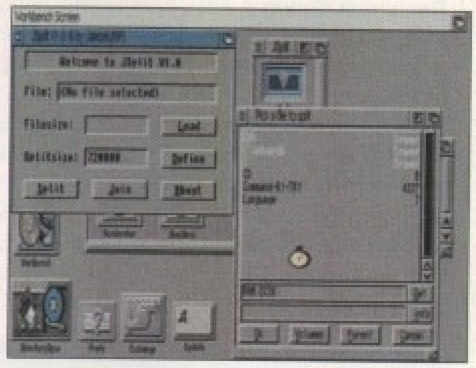
Hot on the heels of Mega Disk #1, which featured oodles of tiny top-quality games, comes this selection of utilities. A couple of these programs will already be favourites of Amiga users across the country such as GUIarc, which removes a great deal of the tedium from archiving and extracting LHA files. There are also plenty of decent programs that might not be part of everybody's collection.

For instance, ARestaure is a file undeletion program, the sort of thing you might not fully appreciate the value of until that special file bites the dust and there's no back-up copy to fall back on. Chopper performs the same function as JSplit, reviewed elsewhere in these pages, with a similarly attractive interface, and Crypt is an excellent file protection program ideal for paranoid comms buffs.

There's also SystemSpeed, a tiny benchmark program, SoftProtect, a way of tricking your machine into thinking a floppy disk is write-protected when it's not, and a whole host of other interesting offerings. And for just £1.75 for a total of 26 programs, Mega Disk 2 is also very good value.



There'll be no more messing around with command lines whenever you want to de-arc an LHA archive thanks to GUIarc



Slice files up into manageable chunks with JSplit

Flummy Utils #2

Written by: Various
Available from: OnLine PD
Disk No. OU84

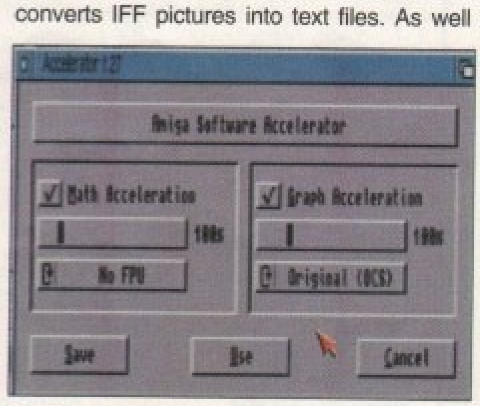
A mixed bag of utilities are included on this disk, of which the highlight is probably JSplit. Imagine for a moment that you want to transfer a large file from your friends' hard drive to your own – possibly a picture or a huge archive. The problem is, it's too big to fit on a floppy disk.

JSplit is designed to deal with this sort of situation. It takes a file and basically splits it into parts of a specified size. It can then rejoin them later, perhaps on another machine. It's a simple but good idea and the user-friendly interface makes this an extremely valuable program to have handy.

The descriptively named ILMB2ASCII converts IFF pictures into text files. As well as possibly being of use to bulletin board operators, this could prove useful for people writing Read-Me documents as, for example, a logo could be incorporated.

Games fans struggling with their favourites will be particularly interested in Frontier Trainer and Skidmarks Edit. These allow various settings to be altered, making the games slightly easier.

Among the best of the rest is Soundbox, a competent if slightly limited sound sample editor and converter. The small amount of documentation provided is in German but the interface is hardly difficult to work with and overall this isn't a bad effort. In conclusion, this is an interesting although scarcely essential compilation of utilities. Still, it might be worth getting hold of if only for JSplit.



A software accelerator is included on the Flummy Utilities disk

Welcome to paradise...

Cheetah PD
29 Green Lane, Middlesborough, Cleveland TS5 7SJ

Freestyle PD
108 Woodside Way, Short Heath, Willenhall, West Midlands WV12 5NH
(Tel: 01922 710985)

OnLine PD
1 The Cloisters, Halsall Lane, Formby, Liverpool L37 3PX
(Tel: 01704 834335)

Philip C Swales
28 Campbell Road, Hartlepool, Cleveland TS25 3BB
(MovieZone costs £1.40)

Professional PD
28a Woodland Rise West, Sunway Park, Sheringham, Norfolk NR26 8PF



Three rough models created using the digitiser. Note that the human face uses more samples than the other two, and is therefore much more accurate

Digitising

Anyone interested in 3D modelling has, at some point, seen a model so well made it makes them stop and admire the creator's handiwork. Whether it be dinosaurs, animated human faces, or cars with smooth, flowing lines, there are plenty of examples around that make you think "how did they do that?"

Often, the answer is that they used a 3D digitiser to 'scan' a physical object and import its vital statistics to a ray tracing package, where the model is tidied up before textures and other effects are added. Indeed, much of the drudge work in modelling can be done by electronic sidekicks if you have the sort of production budgets enjoyed by Industrial Light and Magic.

In high-end digitisers used by movie companies, a scanning laser beam builds up a picture of an object's surface in minute detail before passing the data to a Silicon Graphics machine for interpretation. The 3D artist can build a model in plastic or any other substance, or have it built by the traditional model makers who brought us the Star Wars designs, then digitise it to cut out most of the time-consuming job of translating the model to computer graphics.

PRICE DROP

For a long time now, small companies and enthusiasts have been unable to use this sort of technology, but a growing number of American manufacturers are releasing smaller, less expensive digitisers which are now coming down in price – enough for them to be a realistic option. One such unit is the Immersion Personal Digitiser which, though still not cheap, is a powerful tool for any modeller.

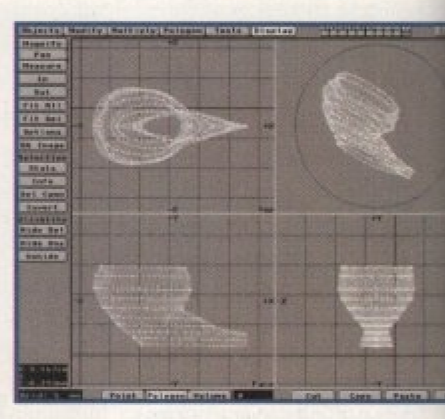
Laser scanning would be far too expensive, so the personal digitiser makes use of a jointed arm (much like a robot arm) with a stylus on the end. This sits on a bread-board-sized base and is connected to the Amiga via a control box and serial cable.

Build quality is as good as you'd expect from a device costing this much. The arm itself is made of tough, thick plastic with a solid brass stylus, and the base board is half an inch thick with rubber feet to stop it sliding around. To avoid any plug difficulties on either side of the Atlantic, the control box uses a standard kettle lead connection, and all necessary cabling (including a custom serial cable) is supplied.

The unit's Vertisketch software is installed in no time and uses ARexx macros to enable the digitiser to be controlled directly from Lightwave's Modeller. There are several control macros, but the most important – Get Point – simply passes a position request to the digitiser's control unit which replies with a three dimensional co-ordinate. A point is then created on screen to correspond to the arm's position when the macro was invoked.

Hardly any delay is involved in the process, so digitising a long series of points is a simple matter of moving the stylus to a new location with one hand and hitting the relevant function key with the other. The manual suggests using F10 for the Get Points macro, but you can set this system up any way you like.

Several macros are supplied to ensure agreement between the arm and Lightwave's internal 3D world. Set Origin, for example, can be used to select any point within the arm's reach and treat that point as Modeller's equivalent of co-ordinate 0,0,0, and the Set Orientation macro ensures that your digitising table is oriented in the same way as the Modeller environment. The latter becom[es] very important because you have an obje[ct] which is too big or awkward to digitise in o[ne] piece. By creating a simple triangle [in] Modeller and aligning it with another that y[ou] create using the digitiser, users can ensu[re] that the centre of the digitiser's universe [is] always in the same Lightwave position.



Even relatively simple shapes, like this pipe bowl, can be digitised faster than you could model them from scratch

With this common frame of reference, [it] is much easier to ensure that two parts o[f a] larger object can be glued together aga[in] once they've been digitised.

I say much easier, but the process still is[n't] what you'd call a walk in the park. Probab[ly] the biggest limitation of digitisers such as t[his] one is that they have problems with large [and] oddly-shaped subjects.

At full stretch, the tip of the stylus will rea[ch] about 55cm from the base of the arm, b[ut] when you have to loop the arm up and ov[er] an object, this reach comes down to abo[ut] 30cm or less.

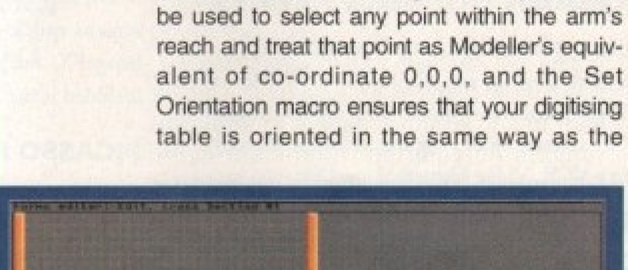
For objects such as a thigh bone (used [in] one of the pre-supplied examples), this me[ans] digitising in two or more sections and [the] resulting hassles when the finished mode[l is] glued together in Lightwave.

For smaller objects, the arm is easily ca[pa]ble of digitising a complete object, and

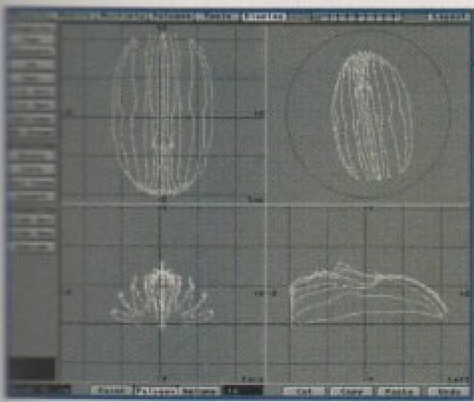
Good for your bones

Why not just use splines, or the Forms editor in Imagine? I mean, it's not easy to create organic shapes, but it can be done. Why spend money on a digitiser? Apart from obvious benefits in terms of cutting design and modelling time, 3D digitisers make it much easier to create a complete model with one continuous skin. Until Amiga packages utilise the 'smart skin' techniques found in some Silicon Graphics software, even fairly simple objects such as a human head are difficult to produce without bolting two or more objects together.

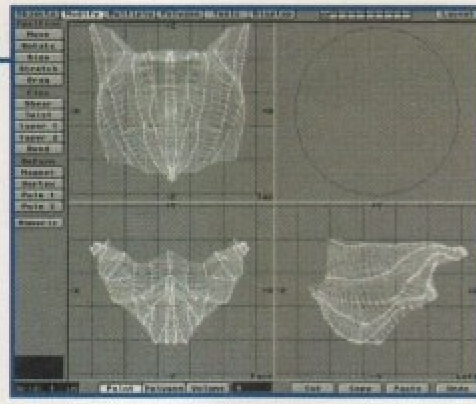
When you make a model out of two or more parts the join will usually show, and there's nothing more realism-killing than a dirty great line where, for example, the shoulder joins the arm. Putting bones into an object like this will produce decent animated effects, but with one continuous object the effect is far more convincing.



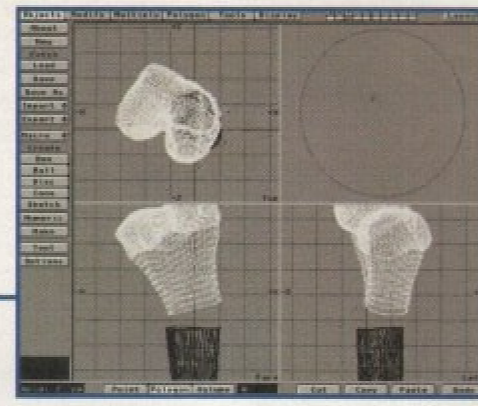
Using Imagine's Forms editor to create organic shapes is one answer, but it can be a very time-consuming process



Digitising a face mask is easy for the Immersion digitiser, but tricky for the user. This one doesn't have enough sample splines for a detailed model



When having a go at objects such as this cat head, projections like the ears can make life more difficult



The supplied macros include several to help with alignment, but it's still very tricky when digitising an object in two parts, then joining it

with depth

Stevie Kennedy looks at Immersion Personal Digitiser and finds an expensive short-cut to modelling heaven

accuracy is impressive. When the stylus is held to the subject's surface at a reasonable angle, errors are in the order of about half a millimetre. It's only when you're really stretching to reach a difficult spot with the stylus that points can start to fly around a little.

If the angle between the stylus and the object is less than about 45 degrees, your digitised points sometimes appear in unpredictable places, though this can be rectified with a quick move operation. Keep the arm within its more comfortable limits and it hardly ever misses the target.

The arm uses sensors at each joint similar to those used in robotics, and these sensors need only keep a very careful eye on the angle at which the arm is being rotated. With this information, and knowledge of the arm's physical dimensions, working out the three dimensional position of the stylus tip is a relatively simple maths puzzle.

TRUE SIZE

The firmware on board the control box uses real world measurements, so if you are digitising a model of a Spitfire which is only 15cm long you'll have to scale it up to its proper virtual size later on. This should be seen as an advantage rather than a disadvantage, though, as it ensures the hardware side of the equation always knows what it's doing and, more importantly, where.

Once all lines have been digitised, you should be able to use Modeller's Skin feature to create a continuous surface across the splines, or the Patch option if you want more control – though this is a trickier method. The finished model's quality and accuracy are affected more by the user's skill at judging where to take sample points and how many samples to take, rather than the accuracy of the arm.

This is the tricky bit, and requires a fair amount of patience and practice. The use of plasticine (again, a small amount of this is supplied) or tape to stick a subject firmly to the digitising table is highly recommended, and any time spent marking off the grid and thinking about the best way to digitise each object pays great dividends.

Be warned that you'll need a steady hand to get the most from Immersion – the arm moves very freely on its joints and can't be positioned 'hands off.' There's an optional foot pedal which can be used to leave both hands free when sampling points, but I found that stomping on this usually caused my hands to wobble at exactly the wrong moment.

Apart from these considerations, there's very little to worry about when using Immersion, and only those with absolutely no dexterity will have any real problems.

You'd have to be a dedicated and wealthy enthusiast to splash out on a peripheral such as this, but for many small companies and self-employed 3D artists the Immersion Personal Digitiser is a high quality, accurate tool which would quickly repay the investment through offering increased flexibility and cutting down on modelling time.

It's just a pity we're going to have to send it back.

SYSTEM ESSENTIALS

RED = Essential **BLACK** = Recommended

Lightwave 3D software

The bottom line

Product: Immersion Personal Digitiser
Price: £1,599+VAT
(prices vary according to any software or implements included)
Supplier: Raytech BBS
Phone: 01862 832000

Ease of use	**8**
Implementation	**9**
Value for money	**8**
Overall	**8**



(01903) 850378

SEASOFT

VISA · MasterCard · Access

AMIGA PD & SHAREWARE

A1200 ONLY

1885 AGA UTILITIES (3)
Rend24, PPShow, Viewtek, BBlank, ForceVGA, DoubleX, Plasma, Icon Illusion, Quick Grab, Ham8-JPeg, Clouds etc.
1619 A1200 HD SET UP (1)
A1200 HD prep disk
1273 ASI FIX DISK (1)
Get A500 programs working!
1431 BIG TIME SENSUALITY (2)
Impressive MegaDemo
1358 BIG GIRLS (X) (1)
1732 BODY SHOP 8 (X) (3)
Page 3 style pictures
1834 BREATHTAKING DEMO (5)
Megademo needs 4 megs/HD
1875 C CRAWFORD (X) (3)
1881 CLAUDIA SCHIFFER (X) (3)
Excellent pictures of top models
1873 CHANNEL Z MAG (2)
Packed with articles, utilities etc.
1758 CYBERTECH CORP (2)
Destroy the Aliens if you can!
1384 DIAGNOSTIC PROG (1)
Comprehensive A1200 tests
1660 DIRT (1)
Demo from Mystic
1725 DONKEY KONG (1)
Classic Platform game
1879 ELLE MCPHERSON (X) (3)
1383 ERIKA ELENIAK (X) (1)
Excellent pictures of top models
1376 EXPLICIT 2 DEMO (1)
Some stunning effects
1756 EVIL INSECTS (1)
Stunning puzzle – shoot 'em up
1408 FIT CHICKS VOL 3 (X) (2)
Page 3 style pictures
1340 FULL MOON DEMO (1)
Stunning AGA demo
1802 FRIDAY AT EIGHT DEMO (1)
1663 ILEX DEMO (1)
A must for the Demo collection
1970 KILLING TIME DEMO (4)
Spectacular AGA Demo
1345 LOCK PICK 2 (1)
Helps install many games on HD
1772 LOTTERY WINNER (1)
Will it help you win a Million?
1775 MAX OVERDRIVE 2 (3)
Breathtaking AGA Demo
1344 MAGIC WORKBENCH (1)
Jazz up your WB - needs HD

A1200 ONLY

1936 MAGIC WB EXTRAS (2)
More Magic Workbench Icons
1813 MINI AGA SLIDESHOW 2 (4)
Excellent Raytraced pictures
1655 MISSILES OVER XENON (2)
AGA "Missile Command" game
1754 MAMMA WAS A VAMPIRE (2)
A variety of excellent effects
1711 MONOPOLY (1)
English version board game
2006 MOTION DEMO (2)
Another Party 94 Winner
1811 MOVIEGUIDE AGA (2)
Learn all about the movies!
1941 NEXUS 7 DEMO (1)
Stunning Demo
1369 NINE FINGERS (2)
A must for all Demo fans.
1938 VIRTUAL DREAMS (3)
Psychedelic Demo - a must for Demo fans (needs HD LHA format)
1798 ROKETZ V2 (1)
Excellent gravity/thrust game
1969 ROOTS DEMO (1)
Blow your mind with this Demo
1805 SHARD ART (2)
Excellent Ferrari pictures
1910 AGA SPECTRUM EMULATOR (2)
Latest emulator with 23 games
1714 SOME JUSTICE 94 (3Meg)(1)
Excellent sound track Demo
1978 SOME JUSTICE 94 (3Meg)(1)
Fixed version for A4000 owners
1865 SOUL KITCHEN DEMO (2)
Brilliant Demo from Silents
1752 SWITCHBACK DEMO (2)
Excellent AGA demo form Rebels
1793 TOOTHBRUSH DEMO (2)
Watch that toothbrush
2004 THE PREY DEMO (2)
Stunning Demo from Polka Bros
1974 TWISTED DEMO (4)
Out of this world (Needs Fast Ram)
1773 VIDEO TRACKER AGA (1)
Ultimate demo maker
1839 VIDEO TRACKER EXTRAS (4)
Help with your Demo making
1867 THE WEATHER GUIDE (3)
Full of interesting information
1514 TUTANKHAMUN (2)
AGA Slideshow of the treasures
1757 WIT PREMIUM DEMO (1)
Stunning Demo from Frezers
1797 ZOOTJE DEMO (1)
Weird – Beavis & Buthea

GENERAL UTILITIES

1766 ACCOUNTS MASTER 3# (1)
Excellent Accounts package
1480 AGENE V4.18 (1)
Genologic package
1771 CITIZEN PRINT MANAGER (1)
1483 CODE MUNGUS V5.7 (1)
Highway code tutor
1310 COPIERS UNLIMITED # (1)
Excellent collection of copiers
1786 COMPUGRAPHIC FONTS (4)
Vols 17 to 20 of excellent fonts
1916 CRUNCHMANIA # (2)
Various utilities
1216 D COPY V3 (1)
Copying program
1490 DISK MANAGER 3 (1)
Excellent database
1491 EASY CALC PLUS # (1)
Comprehensive spreadsheet
1647 FINAL WRAPPER # (1)
Final Writer Macros
1997 FINAL WRITER PATCH (1)
Speed up FW by up to 400%

2009 HARD DRIVE UTILS # (2)
Aback Up, Fix Disk, VC, Click Dos 2, ReOrg, Tools Daemon, Vr Back Up etc.
1918 HD GAMES 2 INSTALLER (1)
Install many games on to your HD including Mortal Kombat etc.
1626 ICON EDITOR V4 (1)
Excellent Shareware Icon Editor
2003 IMAGE STUDIO V2 # (2)
Latest Shareware version - Image processor and conversion package
1951 IMAGINE OBJECTS (3)
Excellent Starwars objects
1954 IMAGINE OBJECTS (1)
Babylon 5 objects
1719 LION KING CLIPART (3)
IFF Colour clipart from Disney
1769 MENY MENU SYSTEM # (1)
Menu system used on TI, AMFM etc.
788 MESSY SID 2 (1)
Amiga > PC File converter
1999 MORSE CODE TUTOR (1)
Excellent training program

1919 MSDOS > AMIGA DOS 2.3 (1)
Adds Msdos commands to the Amiga
1261 N COMM V3 (1)
Modem package
1987 PAGESTREAM 3F UPDATE (2)
1318 PRINTER DRIVERS (1)
Canon BJ; HP Deskjet; Ricoh LP1200
1998 R.A.E. TUTOR (1)
A must for amateur radio enthusiasts
1768 SID PROF V2.01a # (1)
The very latest version
1770 SNOOPDOS V3 # (1)
1948 TERM V4 (3)
Excellent Term package
1305 TEXT ENGINE V4.1 (1)
Text Editor/Word processor
1833 THE DESIGNER # (1)
A GUI creator
1920 VIRUS CHECKER V6.50 (1)
The latest Virus Checker - a must
2011 VISION & SOUND # (3)
PPMore, PPShow, PPAnim etc.

NEW TITLES ARRIVE DAILY – THOUSANDS AVAILABLE
PLEASE GIVE US A CALL IF YOU CAN'T SEE WHAT YOU WANT

ONLY £1.00 PER DISK FOR 5 OR MORE

1 disk - £1.50, 2 to 4 disks - £1.25, 5 to 19 disks - £1.00, 20+ disks - 90p

Number of disks shown in brackets
Titles marked # will not work on A500 (V1.2/V1.3)
Titles marked (X) are suitable for over 16s only

SPECIAL VALUE PD PACKS

IMAGINE OBJECTS
16 Disks packed full of quality Imagine objects covering many subjects.
£12.00

KLONDIKE AGA
Klondike V3 + 10 card sets Airbrush, C64, Puzzled, Trad, Reko, C. Crawford, Faces, Manga, Iron Maiden (A1200 HD Only)
£8.00 for set

GLAMOUR PACK
16 disks packed with AGA beauties from the famous Body Shop collection
£12.00
(A1200 only – not suitable for anyone under 16)

CG FONTS PACK
Over 180 Compugraphic fonts (16 disks) for WB2 & 3, Wordworth 2+, Page Setter 3 etc.
£12.00

OctaMED MODS
Hundreds of modules from the Med Users Group members collection
10 disks per pack, 6 packs currently available
£8.00 per pack

OFFICE PACK
5 essential tools for the small office – Word Processor, Database, Spreadsheet, Forms Designer & Accounts
£4.50

OctaMED 4
Full version of this A500 compatible music program, disk based manual and lots of samples & modules to get you started
6 disks for £5.00

SAMPLE ILLUSIONS
A collection of unique sounds created with the Aural Illusion sample processing package and saved as 8-bit IFF samples
6 disks for £5.00

BITS & PIECES
450 files of various clips, drum loops etc. in Music-X (10 disks), Amiga MIDI (9 disks) and PC MIDI (9 disks) formats
£8.00
(Please state format required)

MUSIC UTILITIES

1706 AUDIO MAGIC 8 # (1)
FM Synth, Midi Packet Master, OctaMED Player, X Module etc.
1996 AUDIO MAGIC 12 # (1)
Sound Machine, Sonic Drum Kit, Play 16, CD-DA
1767 DROP IN THE OCEAN (1)
Demo of all Midicraft products
1921 EAGLE PLAYER V1.54 (1)
Multi format music player (LHA format)
1462 MIDI TUTORIAL (1)
Problems with MIDI - Help is here
1989 MIDI UTILITIES VOL 1 (1)
1990 MIDI UTILITIES VOL 2 (2)
Loads of useful Midi utilities
1992 MUSIC X UTILITIES VOL 1 (1)
1993 MUSIC X UTILITIES VOL 2 (3)
Packed with Music X Utilities
1463 NO SAMPLER? (3)
Various rippers and other tools
1444 OctaMED V4 MANUAL (1)
Help with OctaMED V4
2024 PROTRACKER V3.15 (1)
Latest version of this popular tracker
1472 THE BEST OF 94 (3)
Disk mag for all OctaMED users
1855 X BEAT PRO III (1)
The very latest Drum Machine

OCTAMED V5 MODULES

1456 BARNEY WARTS 'N' ALL (1)
1925 FADE TO GREY (2)
1461 FRIENDS OF PAULA 5 (1)
1659 FRIENDS OF PAULA 6 (1)
1927 HARMONIOUSLY DIFFERENT (1)
1436 MAKIN TRAX VOL 1 (1)
1504 MELODICALLY CORRECT (1)
1503 MUSICALLY CHALLENGED (1)
1928 MUSIC FIRST BLUES (1)
1661 ROBS ROCKERS (2)
1922 TALK TALK VOL 1 (1.5M) (1)
1923 WHAT CAN YOU DO FOR ME (2)

We also stock the entire range of Med User Group Samples and Mods

LOADS OF OTHER MODULES FOR PROTRACKER ETC. AND THOUSANDS OF IFF/RAW SAMPLES ALSO AVAILABLE

2014 THE GATHERING 94 (10)
Various Modules from The Gathering 94 Party (LHA format)

GAMES & EDUCATION

1831 APOLLO 11 (2)
Text book about Apollo mission
1527 BACK TO SCHOOL 1-3 (3)
Educational games for kids
1532 CALCULUS COMBAT (1)
Mental arithmetic quiz
946 DINOSAURS VOL 1 (1)
Text book all about Dinosaurs
1636 DR STRANGE (1)
Excellent colourful platform game
1829 DUMMIES GUIDE TO COMMS AND INTERNET (2)
A very helpful guide to the net
1716 GREENS 5 # (1)
Great Flashback game
1522 GCSE MATHS # (1)
Helps with your studies
1517 ILLUSIONS (1)
Excellent Shareware art package
1510 KIDS 1-3 (4)
Excellent educational programs
1827 KIDS DISK 5 (1)
3 educ. programs maths/letters
1828 KIDS DISK 6 (1)
Help Mum with the shopping!
2008 NIGHT MATHS ATTACK (1)
Excellent Maths program for kids
1843 PARANORMAL INVESTIGATIONS # (2) - Learn all about UFOs etc.
1521 RUNE MASTER (1)
Learn all about Rune Stones
1717 SCRABBLE # (1)
Traditional board game
2000 SPACE TRAVEL (2)
Text Book about Space Travel
1427 STARBASE 13 (2)
Graphic space adventure game
1533 STATES OF EUROPE (1)
Textbook on Europe
1524 THREE LITTLE PIGS (2)
Excellent Talking story book
1517 TOME OF MYTHS (2)
Textbook Classical Mythology
1780 UNKNOWN UFO (6)
Full information about UFOs
1526 WORD FACTORY (1)
Spelling game for young kids
1271 WORLD WAR II (1)
Second World War textbook
1607 WORLD MAPS COLOUR CLIP ART A-Z (9)
IFF pictures for DPaint V4/V5

ASSASSINS GAMES

We stock the complete range of Assassins Games (1-226)
SPECIAL OFFER – BUY 10 DISKS FOR ONLY £8.00

ASI215 Super Battlezone, Cybertris, Mash the Potatoe
ASI216 Bomber 2000, Black Dawn 94, Dice
ASI217 Mangled Fenders, Dual Maze, Cubik
ASI218 Age of Rock, Hearts Black Lady, Commando Raid
ASI219 Chopper Attack, Route 66, Gimme 5
ASI220 Dr Strange, Alien Frenzy, I-Worm
ASI221 Hot Air, Brazza n Runt, Pots of Fun
ASI222 ESP, Loop N Loop, Poing II
ASI223 Laser Bikes, Operation Desert Storm, Poker Solitaire, Maze
ASI224 Square Stones, Top Hat Willy, Star Buster
ASI225 Steel Devils, Xenostar, Back Gammon
ASI226 Jumping Jack, Technoball, Zillo
ASIWB6 Mini Pacman, ESnake, Roach Farm, Othello, Super Cod, WBrain, Mastermind, Mine Swepper 2.7

AGA KLONDIKE CARD SETS

SPECIAL OFFER – BUY 10 DISKS FOR ONLY £8.00

1791 BETTY PAGE (X) (1)
1640 CINDY CRAWFORD (X) (1)
1760 DUNGEONS/DRAGONS (1)
1790 DR WHO (1)
1715 ELLE MCPHERSON (X) (1)
1965 ELLE MCPHERSON 2 (X) (1)
1849 EMPIRE STRIKES BACK (1)
1858 FACES 2 (1)
1762 FAST CARS (1)
1981 FLOWERS (1)
1862 HAJIME (FANTASY) (1)
1982 LION KING (1)
1854 MARILYN MONROE (X) (1)
1984 PHOTO CD (1)
1864 PERIHELLON (1)
1986 PRETTY WOMAN (1)
1852 RANMA (MANGA) (1)
1852 RETURN OF THE JEDI (1)
1984 RIPPIN YARNS (1)
1851 SAILORMOON (1)
1642 SANDMAN (FUTURIST) (1)
1980 SHERILYN FENN (X) (1)
1718 STAR TREK OLD (1)
1764 STAR TREK NEW (1)
1853 STAR WARS (1)
1765 SWIMSUITS (X) (1)
1857 TRADITIONAL (1)
1763 X-MEN (1)

CLR LICENCEWARE

WE STOCK THE COMPLETE RANGE OF CLR TITLES

CLU 06 SUPERSOUND V4.7 (£3.95)
Brilliant sampling package
CLG 25 WHITE RABBITS (£3.95)
Highly original puzzle game
CLG 62 TOADO (£3.95)
Classic "Frogger" Game
CLE59 TOUR THROUGH TIME (£5.95)
From the Prehistoric to Space Age
CLU32 POWER TEXT 2 (£3.95)
Word Processor & Spell Checker
CLG 65 WEAPONS MASTER (£3.95)
Impressive Street Fighter clone
CLE 65 JUNIOR MATHS (£3.95)
Pre-Early school fun Maths tutor
CLE 66 BASIC NOTE TUTOR (£3.95)
Learn to read music and music quiz
CLE 67 PHOTO (£5.95)
Comprehensive photographic manual
CLG 68 WITNESS (£3.95) #
Classic "Defender" style game
CLG 69 CYBERDROID (£3.95)
If you love games this has everything
CLG 70 WINNING POST (£4.95)
Excellent Horse Racing Sim.
CLE 61 SOUND/ANIMATION STUDIO (£4.95)

CLR ENCYCLOPEDIAS

Excellent range of educational disk based encyclopedias, with detailed text, diagrams and photos

CLE01 DINOSAURS 2 (£4.95)
CLE02 GEOLOGY (£4.95)
CLE03 SOLAR SYSTEM (£5.95)
CLE07 FRESHWATER FISHING (£4.95)
CLE14 ECOLOGY (£5.95)
CLE32 SPITFIRE (£4.95)
CLE33 MESSERSCHMITT BF109 (£4.95)
CLE34 YOUR FIRST PONY (£4.95)
CLE35 SOLAR SYSTEM 2 (£5.95)
CLE38 HOME INVENTIONS (£4.95)
CLE49 DINOSAURS 3 (£5.95)
CLE54 THE TITANIC (£4.95)
CLE56 CHEMISTRY (£4.95)
CLE58 STARS & GALAXIES (£5.95)
CLE62 BASIC MASSAGE AND AROMATHERAPY # (£5.99)
CLE63 TUTANKHAMUN (£4.95)

MIDICRAFT MAGAZINE

Following on from where the highly successful AM/FM left off, this new disk based mag from the Craft Brothers is a must for all Amiga musicians
£2.50 per issue
(optional samples disk £2.50)

MORTON STRIKES BACK AGA – £7.00

Brilliant A1200 only version of this classic style platform game with 80+ colourful levels
NON AGA VERSION – £5.00

NOTHING BUT AMOS

Issue 7 of the best selling AMOS disk magazine
£2.50
(£4.50 with support disk)
Issues 1 to 6 also available

OG 2 – £3.95

A1200 AGA Version of this highly successful commercial quality platform game

OG 1 – £3.95

Non AGA version

TYPING TUTOR 2

Updated version of this comprehensive Typing Tutor with structured lessons and speed tests. A must for beginners and experienced typists wanting to improve their skills
£3.95

NEW – AURAL ILLUSION V2 – £20.00

8/16 BIT SAMPLE PROCESSOR
32 bit processing – Powerful editing functions
30 Effects including Time Stretch, Graphic Eq, Mixer & Resonant Filter
55 Manipulations including Tuning, Filters & Modulations etc.
Compatible with most popular 8/16 bit file formats including IFF, AIFF, WAV, VOC etc. – Improved Synthesised Sound Editor
(Note – needs Kickstart 2 or greater & 2 Meg of RAM)

NEW – KIDS ONLY – £10.00

Originally due for commercial release this brilliant collection of educational activities is now only available from Seasoft
COLOURING PAD, DOT 2 DOT, PICTURE SLIDE, PAIRS, MUSIC MAKER, WORD SEARCH AND I-SPY
Each colourful activity has various skill levels making this title ideal for kids of all ages.

A DROP IN THE OCEAN – £10.99

This audio CD shows what can be achieved with a modest studio setup and an Amiga.
12 original compositions from the Craft Brothers in a variety of styles – Pop Reggie, Folk Rock, Progressive ROck etc.
In stock NOW

MIDI MODULES

High quality Music-X and Amiga/PC MIDI files (state format required) produced and arranged by Kevan & Gareth Craft
Volume 1 - £15.00 Vol 2 for Keys - £10.00
Volume 3 - £20.00
Dynamite Drums 1 – £10.00 Dynamite Drums 2 – £15.00
Call for further details

NATIONAL LOTTERY – IT COULD BE YOU!

CLU 43 – LOTTERY FORCASTER – £3.95
If you have run out of ideas for picking your numbers then this is for you. Simple to use program picks numbers at random or based on your birth date and displays them on a Lottery Card
CLU 44 – NATIONAL LOTTERY – £3.95
Powerful lottery forcaster which uses various methods including past results to pick the winning numbers – you hope

T.I.10 - £2.50

Latest issue of the MED Users Group Disk magazine. Essential reading for all OctaMED users
(Iss 6 to 9 also available)

OctaMed V5.01

with 220 page Companion tutorial.
NOW ONLY £19.95
(£1.00 P&P)

ETHEREAL - £2.50

Amiga floppy disk version of Dave Sullivans track for the "Amiga Experiment" CD. Although the CD may not now be published you can hear Daves work on this huge OctMED module

H/W PROGRAMMERS MANUAL

Vol 5 & 6 now available
£5.00 each
Volumes 1 to 3 – £12.50
Vol 4 – £5.00

F1 56 GIDDY 2 – £3.99

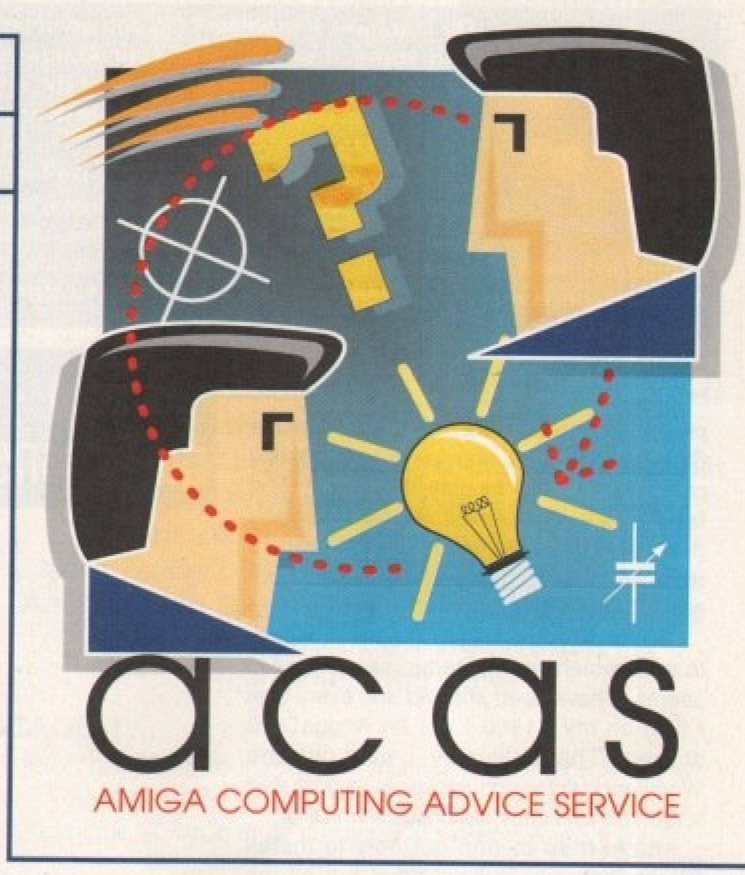
Sequel to the Best Public Domain Game "Giddy"
Commercial quality platform game

FI LICENCEWARE

WE STOCK THE COMPLETE RANGE OF F1 TITLES

F1 07 FORTRESS # (£3.99)
War arcade/strategy game (Need 2 Meg chip)
F1 10 KARATE MASTER # (£3.99)
Serious Karate sim (2 Meg chip)
F1 18 RELICS OF DELDRONEYE (£6.99)
Epic adventure game (2 Meg chip)
F1 22 ASK ME ANOTHER (£3.99)
Educational programs for 3+ years
F1 27 THE STATES OF EUROPE (£3.99)
Encyclopaedia about Europe
F1 28 C.L. INDEX # (£3.99)
Amiga Dox C commands ref book
F1 31 POWER BASE # (£3.99)
Powerful, user friendly database
F1 33 POWER PLANNER # (£3.99)
Personal organiser
F1 34 F1 CHALLENGE # (£3.99)
Manage your own GP racing team
F1 37 SUPER BINGO 2 # (£3.99)
Bingo game (Need 1 Meg chip)
F1 38 AMBASSADOR PRO # (£3.99)
Fruit machine sim (Need 1Meg chip)
F1 40 HENRY HOUSE (£4.99)
Colourful platform game for kids
F1 42 MAGPIES KIDS CLIP ART (£4.99)
400 high quality scanned/IFF pics
F1 43 MAGPIES CLIP ART (£7.99)
900 high quality scanned/IFF pics
F1 44 BLACKBOARD V3 (£5.99)
Image processor. Needs 2 drives
F1 48 ERIK (£3.99)
Commercial quality platform game
F1 50 BEGINNERS GUIDE TO AMOS (£4.99)
F1 51 WORKBENCH/AMIGADOS# (£4.99)
Text book about Kick V2 or above
F1 55 AMOSZINE 4 (£3.99)
Special edition for all Amos users
F1 59 PUNTER (£3.99)
1-4 Player Horse Racing Game
F1 60 ULTIMATE QUIZ (£3.99)
Well presented Trivia Quiz
F1 61 CAPTAIN CARNAGE (£3.99)
Excellent "Alien Syndrome" game
F1 66 G.R.A.C. # (£4.99)
Powerful Graphic Adventure Creator
F1 69 GUITAR CHORD COACH (£3.99)
A must for all guitarists – teach chords

Time for another bout of problem bashing courtesy of the extremely helpful ACAS pages



You're undeletable

I used to own an A500 computer with a GVP hard drive. One of my favourite games was Silent Service II, which was installed onto a hard drive partition by the program's own installer program.

After about three months with my A500, I eventually had the opportunity to buy a second hand A1200, which I duly did of course. I then set about transferring my programs on my A500's drive to the A1200's internal IDE drive using Quarterback.

I have now finished Silent Service II and tried to delete it from my hard drive. I have managed to delete all the files in the Silent Service II drawer but when I try to delete the drawer itself, I get the error message 'Icon in use.'

I know a little about Workbench and AmigaDOS and realised that there was probably an Assign statement in the user-startup or startup-sequence scripts. However, after browsing through these two files with a fine toothcomb, I can't for the life of me find any Assigns relating to the game. How can I get rid of the damned Silent Service II icon?

G. Whittaker, Sussex

There are a few ways to create Assigns for Workbench, besides having them directly stated in the user-startup or startup-sequence scripts. One way is to have a completely separate script file containing the Assign statements which is called from either the user-startup or startup-sequence by an Execute command. See if you can find any Execute commands and check the files they are calling.

Also, another common method is to have a file in the WBStartup drawer. Anything in here is automatically executed when you boot Workbench, and your game may well have placed a file in there which is creating the Assigns.

Personal plea

There were several things I wanted to buy for my Amiga 1200. Unfortunately, when I was ready for the Personal Font Maker update, I was not able to obtain it as it was no longer available. Perhaps there is someone who has it and no longer has any interest in it? Can you help?

Mr F Fortune, Fife

We failed to turn up a possible source for you Mr Fortune, but there may be someone out there who can help you. So, if you have the item in question and no longer require it, drop us a line and we'll put you in touch with Mr Fortune.

Fast math

I have an unexpanded A1200 which is beginning to seem a little on the slow side since I started playing flight sims. I am now looking to increase the speed at which my A1200 runs and until I can afford a 68030 accelerator board, I was wondering whether I can simply add a floating point unit (FPU) to my A1200's insides to speed things up a little.

Is there a simple FPU upgrade I can buy? I'm quite prepared to do a bit of soldering. Also, why are there no 68040 accelerators around for the A1200?

J. Matthews, Grimsby

For a start, you need to upgrade your memory. Believe it or not, merely adding extra Fast RAM to your A1200 can significantly speed up some software, particularly flight sims. This is because Fast RAM is 32-bit memory independent of Chip RAM and can be accessed very quickly indeed.

It's not possible to simply fit an FPU to your Amiga's insides. Currently, the only way to do so is via a memory upgrade board which features an FPU socket (of which there are many), or through installing a processor upgrade board such as the many 68030 products around.

Be patient, save up your dosh and buy a 68030 upgrade board with FPU slot and 72-pin SIMM slots (preferably two or more). That way you will solve all your A1200's speed and memory problems in one go.

There are no 68040 accelerators because there are problems in keeping these powerful chips cool, and in the extremely small confines of an A1200 there is no room to fit a CPU fan on the 68040. Another problem with fitting a 68040 is that it's big enough without having a fan stuck on top of it. So, it's all down to a space and heat problem.

I suppose it wouldn't be too much of a conceptual leap to figure that maybe an external 68040 upgrade board in some sort of casing with a lead connecting it to the A1200's upgrade slot is possible, but no one has done it yet – presumably due to the costs involved. I certainly wouldn't mind a big bad '040 in my little A1200, so if any entrepreneurial boffin types are out there, take heed.

Sim City cockup

I have owned an Amiga 1200 with a Blizzard 1200/4 4Mb fast RAM and GVP 85Mb hard drive, which was installed by the shop I bought it from. The hard drive is split into three partitions: Workbench (5Mb), Work, (40Mb) and Games (40Mb). I also have a Commodore 1942 monitor and a Star LC24-200 colour ➤

Memory expense

I have been shopping around for the best price for 72-pin SIMM modules. I have a DKB 1240 '030 accelerator card which has one 72-pin SIMM socket. Ideally, I want 16Mb as I am keen on computer graphics. Unfortunately, this would mean I would need a single 16Mb SIMM, which is hard to find and is a lot more expensive then even two 8Mb SIMMs.

Why is it that one 16Mb SIMM is more expensive than two 8MB SIMMs when you are getting the same amount of memory in fewer components? Are we being ripped off?

D. Taylor, Liverpool

16Mb SIMMs are expensive because they use extremely compact memory chips compared to 8Mb SIMMs. Such memory chips are, at the moment, more expensive to produce. As demand increases and production becomes more cost effective, we will no doubt soon see 16Mb prices drop dramatically, and will probably start drooling over even bigger SIMM modules.

Such is life in the fast moving field of computer technology. Just think back to when you thought 1Mb was expensive and opulent before 4Mb and 8Mb SIMMs appeared.

Do you have a problem? Do you sometimes find yourself poised over your Amiga with axe in hand, spouting profanity at the stubborn refusal of your Amiga software or hardware to behave properly?

Well, calm down and swap the axe for pen and paper, jot down your problems, along with a thorough description of your Amiga setup, and send it off to Amiga Computing Advice Service, IDG Media, Media House, Adlington Park, Macclesfield SK10 4NP.

Any questions?

➤

printer. Last Christmas, my wife bought me Sim City 2000 and after following the install procedure I tried to play the game. The result was my that Amiga crashed, allegedly due to the program not accessing the required libraries (according to a technical guy at Maxis).

That is not my problem. The problem now is that somehow my startup sequence file seems to have been affected and every time I turn on my A1200 I get an AmigaDOS screen. The only way I can get the Workbench screen to appear is to boot with a Workbench floppy disk installed in DF0:.

I have tried to find out how to install Workbench onto a hard drive but all the shops inform me that unless I am 'up to speed' with AmigaDOS, I will find it difficult – however, they will do it for me for a small remuneration, typically £16 plus VAT.

What I would like to know is:

1. What is so difficult about installing Workbench onto a hard drive?

2. Why doesn't Workbench have an install program?

3. What is the best book to instruct a novice on Workbench?

4. Having looked at computer languages to learn, I am unable to distinguish between GFA Basic, Easy Amos, and AmigaDOS. Which will be the best one to get into?

D. Hargreaves-Turner, Norwich

I can't imagine why Sim City has messed up your startup-sequence file. Any installation program worth its salt should have made a backup of your startup-sequence file before altering it. Even though your startup-sequence is messed up, Workbench should still be resident on your hard drive. The startup-sequence file is actually responsible for loading Workbench, but you can do this manually yourself. Try typing Loadwb. This should set your hard drive into activity, hopefully loading Workbench. Next, type Endcli to close the AmigaDOS screen, revealing Workbench in all its glory.

You should now look in the S: drawer and look for a file that looks like a backup of the startup-sequence, something like startup-sequence.bak or similar. Rename this to startup-sequence and reboot your Amiga – hopefully, this should restore your original setup.

As for your specific questions – well, here we go with the answers:

1. Workbench is really easy to install and does indeed have its own install script program (which answers question 2). Even though your internal hard drive was already formatted and partitioned when you bought it, you should still have received the Workbench installation disks as well as a disk for your hard drive with the appropriate utilities for formatting and partitioning.

I also find that a 5Mb Workbench partition is way too small. Many programs sometimes install their own files to this system partition during installation, such as libraries, fonts and other system files, so you may soon find programs refusing to install because your Workbench system partition is full. You can get past this problem by using ASSIGNS to re-direct some of Workbench's 'system' drawers, such as FONTS: to another partition, but it is a little clumsy and untidy.

3. There are quite a few books on this subject, all of them being pretty good. However, the *Insider Guide* series of publications from Bruce Smith books stand out in my mind.

4. This depends on what type of programs you want to write. GFA Basic is aimed mainly at application programmers, Easy Amos is generally for the games programmer, and I wouldn't recommend AmigaDOS as a programming language.

If you want to write utilities or applications, I would recommend HiSoft Basic from, er HiSoft actually – it's excellent. If it's games you're looking to develop, I suggest you opt for Blitz Basic, which is also very good.

Anorak myth

I want to set the record straight about programmers who are unfairly labelled Anoraks. Everybody seems to think that because you are a programmer, you must be a dull person with no life and few friends.

Well, this is not true. Now that I've got that off my chest, can you recommend a good book on 3D graphics programming? I am keen to create demos and ultimately a game using 3D graphics?

K. Stanley, Birmingham

My definition of an Anorak is someone who's entire social life revolves around their computer, to the exclusion of all else. They are more than likely fashion unconscious, often wearing trainers in conjunction with casual trousers and, even more disturbingly, sporting a tank top.

They wear spectacles which have broken and have been taped in the middle and invariably talk in a rather nasal fashion with a tone of voice akin to Terry Christian of The Word fame.

Unfortunately, Anorak is mistakenly used to describe programmers in general. This may be due to the fact that long ago, when computers were found only in large institutions and took up an entire room, programmers usually had David Bellamy-type beards and did indeed wear tank tops.

They may well have had no social life because programming a computer in those days usually meant flipping switches for each command. A long and tedious process.

Today, however, most programmers are hip, especially those who can produce games with awesome graphics and intros. What would cool films like Terminator be without programmers to create those awesome graphics tools eh? So, not all programmers are Mr Harry Hypotenuse, sum of all the squares – just some of them are.

As for your request for a good book on 3D, you may still be able to get hold of Amiga Real-time 3D Graphics by Andrew Tyler and published by Sigma (ISBN 1-85058-275-0). Ask for it at any good bookstore.

FPU failure?

I have an A1200 which is fitted with a 4Mb memory expansion board which also features an FPU socket. I have recently bought an FPU along with VistaPro version 3.

After fitting the FPU to my expansion board, I was looking forward to using the floating point version of the program. Unfortunately, when I run the FPU version of VistaPro, I get the message 'Program failed (error 800 0000B) Wait for disk activity to finish.' What's going on?

R. Stilby, Warwickshire

It seems as if VistaPro isn't finding your FPU. The same thing happens when you try to run VistaPro without any FPU whatsoever. Check your upgrade board's manual for fitting instructions for the FPU.

Some software will not work when an FPU is detected and to overcome this, many upgrade boards have a 'jumper' (a kind of on-off switch) which allows you to enable or disable the FPU without having to remove it entirely from the board. It may be that this jumper is in the disable position.

Failing that, I'm afraid your upgrade board or FPU may well be damaged. Take your board to the supplier you got the FPU from and ask them to test it with another FPU. This will allow you to check whether the upgrade board or the FPU itself is faulty.

Inside the

Just what you need. Another Internet article. More boring comms talk. Obscure stuff about IP addresses, baud rates and WWW sites. You'd probably rather drink a quart of paint. But in case you aren't fed up with the whole prospect of having to wade through a few more pages of coverage on the superinfobahn, l'autoroute d'informatique, or the information superhighway, here is the article for the Amiga net newbie.

If you've never used the net before, or have been struggling along with AmigaNOS, too scared to venture into the wild waters of AmiTCP, then read on MacDuff. The first thing to bear in mind about this article is we are going to be discussing the Internet with relevance to one particular company, Demon Internet Services, who featured on last month's CoverDisk giveaway.

Demon don't officially support AmiTCP yet, but do unofficially provide a lot of help for people trying to get to grips with it. There is already an installer for AmiTCP on Demon's FTP site, as detailed in one of the boxouts on the following pages, so you shouldn't have to do much faffing about to get it to work from scratch.

Having said that, AmiTCP does need some tweaking to get the most from it, and you will want to search out some of your own tools to replace some of those that come with it.

BARE ESSENTIALS

This article is not going to try to explain how to use the Internet, or how to get files from it, but you will need several files from Demon to be able to follow this article through to its conclusion. These files are: AmiTCP-DISr10.lha, R10-Update1.lha, and AmiDisUtils.lha. They can all be found on Demon's ftp server in the pub/amiga/amitcp-/installer directory.

The first of these files is the actual Demon installer for AmiTCP. This works really well and you shouldn't have any problems installing it. Before you dive back onto the net with your new-found AmiTCP-ness, you really ought to unpack both of the other two files as they contain newer versions of stuff in the main archive.

Now, let's have a look at all the stuff you have just installed. In your AmiTCP directory you should find a directory called bin, one called db and one called usr. There will also be several other directories, but these three are the most important. The directory called bin is so-called because it should contain binaries or programs, and if we look inside we find it does.

This is the nexus of operations for AmiTCP, where everything starts from. Make sure the following items in your bin directory have the 's' protect bit set:

- Link – this is a script to let you get online.
- netstat – an ARexx program giving information about your connection. Not immediately important.
- nntptransfer – very important. This is the script that gets news for you from Demon.
- postnews – again, very important. This script lets you write news articles or follow up other people's articles.
- startnet – this script must be executed before you can do anything else. You might have chosen for it to be included in your user-startup when you installed AmiTCP.
- stopnet – why would you want to?
- SynClock – this script synchronises your Amiga's clock with another machines over the net. Especially useful to people who don't have a clock on their machines and want to download news (as we shall see later).
- talkrequest.rx – not immediately important, this script lets you set up an AmiTCP talk session.
- telnet – this script lets you use telnet.
- tin – this is your newsreader script and is very important.

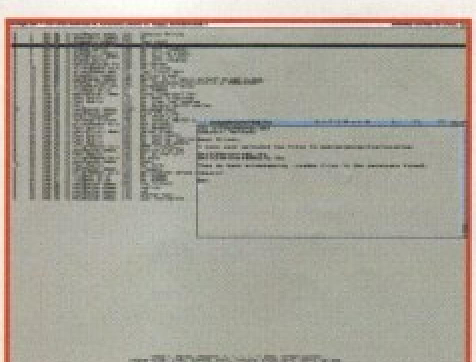
The db directory contains only two scripts

> Demon don't officially support AmiTCP yet, but do unofficially provide a lot of help for people trying to get to grips with it

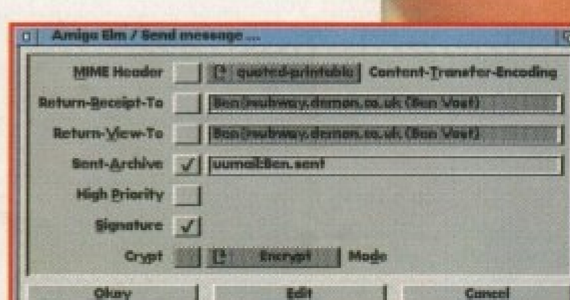




This is a brilliant tool. I wonder who wrote it?



Here I am informing demon of the latest version of AmiTCPHelper



And this is the requester that appears once I have finished editing my mail

Internet

Just when you thought it was safe to look in a computer magazine again, up pops another 'net article. Frank Nord investigates



Buttons for DOpus

Once you are a confirmed netter, you might want to put some net-related buttons in your DOpus config. One that springs to mind is a button for the Aminet index. You'll have to make sure you always put it in the same place, like Text:Index, or something similar, but you can make a button which just needs a command to 'Read Text:Index' and Robert is your father's brother.

You can also set up buttons for uuencoding and decoding, although not for compress (well, I haven't yet figured a way of doing it – if you have then let me know.) For uuencoding you will need an 'AmigaDOS' command like this:

```
C:uuxt a UU {o}
```

for uudecoding you need:

```
C:uuxt x {o}
```

and for uudecoding with LHA decompression you can put:

```
C:uuxt u {o}
```

Remember to make sure that the flags for output window, no filename qotes and cd source are ticked for all of these. You might also want to put a button in to allow you quick and easy access to your AmiTCP directory, scandir AmiTCP: for instance.

we are initially interested in – dialscript and NewsStamp. You can edit your dialscript to change the number of retries you wish to perform when trying to connect, your modem settings, and what number your modem will dial.

The NewsStamp script merely contains the exact date and time you last downloaded news. This is extremely important. If you go away for a couple of days, or go on holiday, make sure you check this script before you get back on the net – if you don't you could be looking at several thousands of articles to be downloaded for news and an enormous phone bill. The way the script reads goes like this:

```
news.demon.co.uk 950305 102014
```

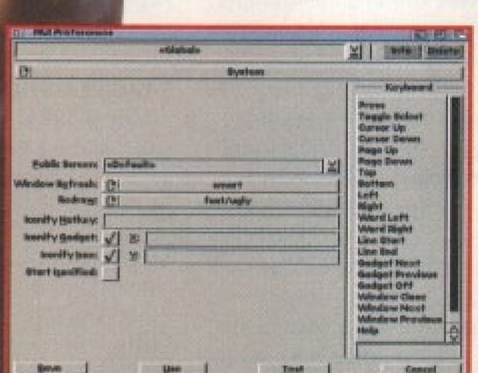
Your news server, year-month-day, hour-min-sec

On the other hand, the usr directory is a real can o' worms. There are files galore in here that we might want to change. For starters you should see directories named; lib, mail, news, spool, and also one named after your username, in my case Ben. Let's go into that directory first of all. In it you should find a directory called .tin and several files all starting with . – .newsrc, .signature, etc. Come back out and have a look in lib. This will contain an aliases file, a Config file and a newsgroup file, among others. The aliases file is for working with Mail and lets you just type someone's name rather than their entire e-mail address.

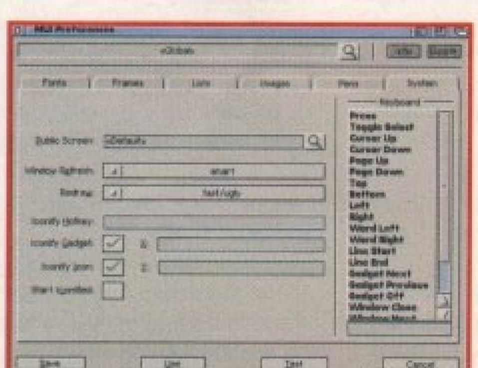
VARIABLES

Config is where all your environment variables are set; what your username is, what your host is, what timezone you are in, etc. Lastly, but by no means least, there is the newsgroups file. This sets what newsgroups nntptransfer goes looking for when you link up. The number at the end of each line is the amount of days before the articles in that group will be able to be trimmed, so don't set it too high otherwise your hard drive will soon fill up. Because I am usually on every day, I set it for one day for most groups.

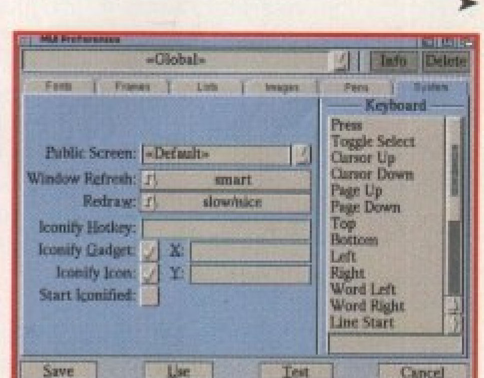
Come back out of lib into the usr directory. The mail directory you should see is where any mail addressed to you will go, the news directory is where all your unbatched news articles will go, and the spool directory is where any mail or articles you send go ➤



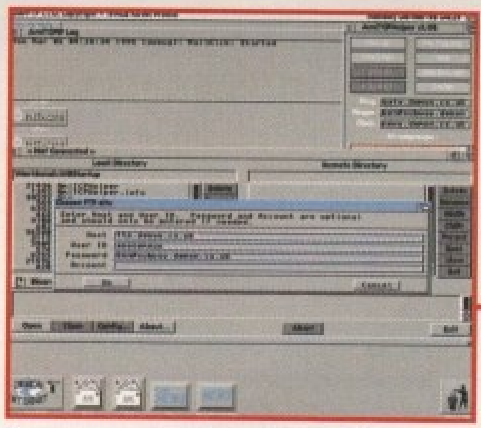
One of the nice things about MUI is that you can set how all your MUI-based applications look. They can look like this...



...like this...



... or even like this



Here we go again, connecting to Demon's ftp server. If you haven't downloaded Gui-FTP yet, see how nice it is compared to nciftp?

until they can be sent.

As a rule, you shouldn't need to investigate these directories in your everyday use of AmiTCP. The only time you might want to visit the Spool directory is if you have written a piece of mail or news you think you shouldn't send. For every piece of mail you will find three similarly-named files. You must delete all three otherwise your sendmail daemon will get confused.

Now it's time to get online. The first thing to do is actually connect to Demon. By now you should have installed AmiTCP from the installer, setting your IP address, password, host name and modem settings, etc. You should also have copied the later versions of some of the files from the LHA archives I suggested previously. If you haven't done this because you haven't been able to use FTP, it doesn't matter – we will do it now.

In preparation for full-on, shell-based, techie-type internet access (we'll deal with the easier stuff later), you should edit your shell-startup script. This can be found in S: and you should add the following line to the end of it:

```
path amitcp:bin sys:rexxc add
```

This will prevent you cd'ing to the AmiTCP directory all the time because it will make AmigaDOS automatically search those directories for any commands you might type. Next, open a Shell window and *only* type the following command if you don't have Startnet in your user-startup script:

```
startnet
```

Easy so far. Now we want to connect, so make sure your modem is switched on and ready to roll. Type:

```
link up
```

Two windows should now appear on your Workbench screen, one claiming to be 'AmiTCPIP Log' and the other 'Dialling... .' The dial window will show what is happening as you try to connect. If you get an engaged tone, then the dialscript will retry for as many attempts as you have set. If the modem seems to have connected, but the dialscript times out, you have two choices. You can either reboot your machine (pretty drastic and not very nice to have to do if you are seriously multitasking) or wait until the dialscript has run through all its iterations and then type link down.

However, this probably won't happen. What *will* probably happen is you will connect to Demon, your 'Dialling...' window will disappear and the 'AmiTCPIP Log' window will say that Mailkick has been started. Mailkick is the program that sends any mail you have written. You are now on the net, officially.

Right, we are now going to download heaps of files. You don't have to download all of these programs, indeed you don't actually have to download any of them – they just make life a lot easier, and in some cases, more interesting. Here's my list of the best ones to get, and why:

> The dial window will show what is happening as you try to connect. If you get an engaged tone, then the dialscript will retry for as many attempts as you have set

Very important

Gui-FTP.lha: amitcp/utils – 40Kb. Much easier than using ncftp, this gives you a file-manager-type window for downloading and uploading files from ftp sites and takes care of logging on, etc.
uuxt20.lha: util/arc – 14Kb. You need this if you want to send files in mail, or decode people's news articles, etc.
compress.lzh: util/arc – 56Kb. If you see files that are labelled filename.Z, they are compressed. Use this program to decompress them. Especially useful for INDEX files.

Fairly important

mui23usr.lha: aminet/dev/gui – 678Kb. Magic User Interface. This is needed for a lot of programs most importantly, in this context, AMosaic.
Mosaic_1.2_AmiTCP.lha: amitcp/extras – 194Kb. The only World Wide Web browser available for the Amiga at the moment. There is a newer, beta version at the AMosaic home page. Needs MUI.
AMHotlistV1.50.lha: amitcp/extras – 15Kb. Hotlist for AMosaic, also needs MUI to work.
plink21.lha: amitcp/utils – 33Kb. Plink is a replacement script for linking up and has many extra options.

Not necessary but handy

AutoSig12.lha: amitcp/utils – 30Kb. Adds random signatures to your news postings.
SynCro1_3.lha: amitcp/utils – 8Kb. A system clock synchroniser.

To get these files we are going to have to use ftp or file transfer protocol. I'm not going to explain what file transfer protocol actually is, it's beyond the scope of this article and there are numerous books on the Internet so you should find literature galore on it. My recommendations are Ed Krol's The Whole Internet, which is available direct from Demon, or any of the FAQs you find online.

You should still have your shell window open, so type:

```
ncftp ftp.demon.co.uk
```

into it. ncftp is the nearest thing to a user-friendly, keyboard-based ftp client on the Amiga, but I still suggest one of the first things you get is GUI-FTP in the list above. You should end up with an 'ftp>' prompt and some text saying welcome to Demon's ftp server. You should then 'cd', just like normal, to the pub/amiga directory from where you can cd to the directories listed above for the files you want to download.

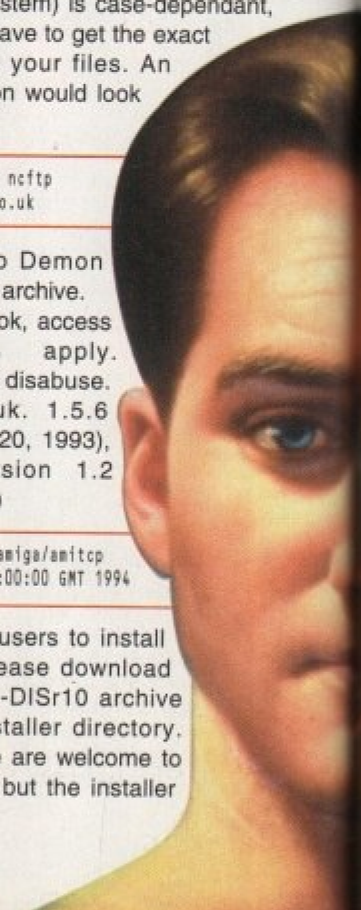
FTP uses a command called get to download the files and Unix (which is what nearly all ftp servers are running as an operating system) is case-dependant, so you will have to get the exact spelling for your files. An ideal situation would look like this:

```
Workbench:> ncftp
ftp.demon.co.uk
```

Welcome to Demon Internet's ftp archive. Guest login ok, access restrictions apply. Logged into disabuse. demon.co.uk. 1.5.6 (September 20, 1993), Amiga version 1.2 (May 3 1994)

```
ncftp>cd pub/amiga/amitcp
Mon Jul 25 09:00:00 GMT 1994
```

For Demon users to install AmiTCP, please download the AmiTCP-DISr10 archive from the installer directory. Other people are welcome to download it, but the installer



In control

Don't despair if your mail goes astray at first or you can't post articles to newsgroups. It happens to everyone. Try to send mail to the technical guys at Demon, succinctly explaining your config and problems and I have no doubt they will be able to at least help you on your way to finding a solution, if not giving you the fix there and then.

FTP and Mail are without doubt the most important (legitimate) uses for the Internet, but if that isn't enough you can try Mosaic which gives you access to the World Wide Web. – make sure your modem goes at at least 14.4k for this as it can be very time-consuming. Even more time-consuming can be IRC or Internet Relay Chat, a sort of global 0891 chatline.

As far as netiquette is concerned, try to be polite on the Internet. If you aren't very good at spelling, there are going to be people who pedantically pick on your every point of grammar if they can't think of a good counter for the points you raise. Try to ignore this and don't get into what are known as 'flamewars' over petty matters (leave it for important ones).

Don't make your signature more than six lines long if you can help it and don't leave all the text in a reply to an article or item of e-mail. Also, it is important to remember that ASCII text isn't a very good conductor of emotion, so be very careful what you type. You might type something 'in a sarcastic voice', but the person at the other end is going to be unlikely to realise this unless she is psychic – in which case, why are you bothering with e-mail?

Use smileys (otherwise known as emoticons) or abbreviations such as for grin, etc. In case you are one of the four or so people who don't know what a smiley is, it's a set of ASCII characters that look like a face when viewed from the side, i.e. :-) or 8(.

is designed specifically for use with Demon Internet Services. Other users may still find this useful, as it contains a complete Mail, News, FTP, Telnet, Gopher and so on installation. Not to be installed over existing AmiTCP setups.

Wed Jan 12 12:59:43 GMT 1994
Please upload AMITCP files into the directory /pub/amiga/amitcp/incoming. Files must be accompanied by a '.readme' or '.desc' or '.rea' or else they will be erased. This file should contain an upload name (e-mail address) and a single line description of the file, as well as any additional descriptive information you wish to include.

Please e-Mail details of uploads to oliver@demon.net.

Tue Jan 11 18:47:33 GMT 1994
Please see the file README for details about AmiTCP
PLEASE note that Demon InterNet do not officially support AmiTCP [yet]

```
disabuse.demon.co.uk:/pub/amiga/amitcp
ncftp>get Gui-FTP.lha

Gui-FTP.lha: No such file OR directory.

disabuse.demon.co.uk:/pub/amiga/amitcp ncftp>cd
utils

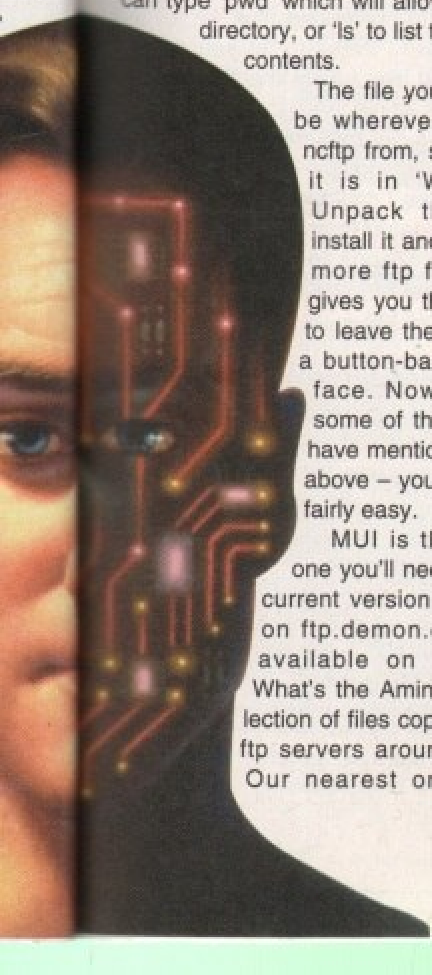
disabuse.demon.co.uk:/pub/amiga/amitcp/utils
ncftp>get Gui-FTP.lha Gui-FTP.lha: ..........

Gui-FTP.lha: 50816 bytes received in 46.08 seconds, 1.08 K/s.

disabuse.demon.co.uk:/pub/amiga/amitcp/utils
ncftp>close ncftp>quit

Workbench:>
```

As you can see, I got my download wrong on my first attempt, but I knew I hadn't gone into the right directory so I just CD'd into utils and repeated my instruction to 'get'. If you aren't sure exactly where you are, you can type 'pwd' which will allow your current directory, or 'ls' to list that directory's contents.



The file you just 'got' will be wherever you started ncftp from, so in my case it is in 'Workbench:'. Unpack this file and install it and we will have more ftp fun. Gui-FTP gives you the opportunity to leave the keyboard for a button-based ftp interface. Now go and get some of the other files I have mentioned in the list above – you should find it fairly easy.

MUI is the only hard one you'll need to get. The current version isn't actually on ftp.demon.co.uk, but is available on the Aminet. What's the Aminet? It's a collection of files copied to various ftp servers around the world. Our nearest one is at the Imperial College in London, next to the Science Museum. It's address (and I can assure you, you will be typing this one in a lot) is 'src.doc.ic.ac.uk'.

If you just want to get MUI right now, that's fine, but a good idea would be to download the INDEX file in the aminet directory. This is a complete listing of all files available on Aminet and you can use DOpus to search through it for files you want to get. Also, there is normally a RECENT file which details programs uploaded to Aminet in the last seven days – if you want to really be up-to-date. The INDEX file gets updated weekly.

If you have already downloaded compress, you can download the INDEX.Z file which should be much smaller. To decompress it, make a copy of it in RAM:, open a shell window and cd to ram: and type:

```
compress -d index
```

I know I didn't put the .Z on the end, compress doesn't need or want it. You will then find that your INDEX.Z file has disappeared, to be replaced by a fully-formed INDEX file which is plain old ASCII text. You can now browse through all the files on the Aminet without having to be online, pick the items you want, get on and retrieve them, and get off again in the shortest possible time.

Next is mail and news. They go hand-in-hand because the articles you send to newsgroups are treated just like normal mail at your end of the Internet connection. Sending mail couldn't be easier. Just load the program 'Mail' in your bin directory and hit the mail button. By default, Mail will use Ed for you to write mail with, but you can change it to another text editor. Most Amiga users on the Internet tend to use Cygnus Ed or Turbotext, but you can use any non-resident text editor you like.

The file you need to edit to change editor is AmiTCP:usr/lib/Config, but this is available from Mail, so you don't have to go searching for it. When you send mail make sure you get the address right – unlike the post office the Internet is very unforgiving for wrong mail addresses, even down to the case of the letters. Once you have got used to Mail, you might like to try Elm which is also available on Demon's ftp server and is, I think, much better.

News, on the other hand, isn't quite so

➤

Other fun stuff

Once you have got used to fiddling around with ftp, here are some more files you might like to get:

Mailmarker.lha: aminet/comm/mail – 12K. This little commodity watches for new mail and tells you when you have some. It can watch as many mailboxes as you like.

MUIEmail.lha: aminet/comm/mail – 39K. MUI-based email program. Nice and quick to use.

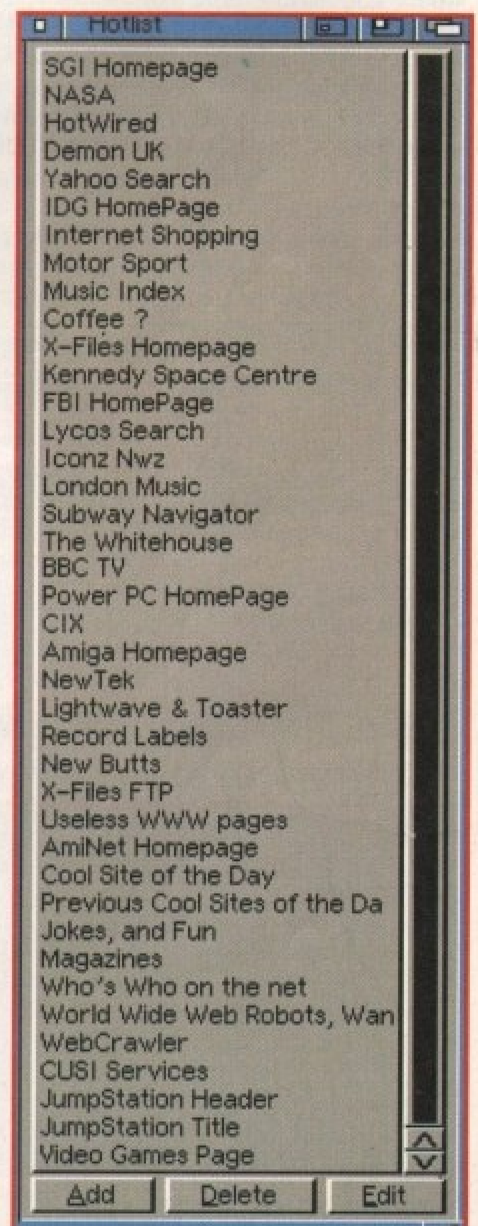
MUIBuilder21.lha: aminet/dev/gui – 679K. Lets you build interfaces for MUI programs and can generate code for a number of different compilers including Amiga E.

PGPAmi23a_4.lha: pub/amiga/util/crypt – 235Kb. If you want your email to be extremely private, then use PGP, which is a military-grade encryption program. This file can be found at ftp.demon.co.uk.

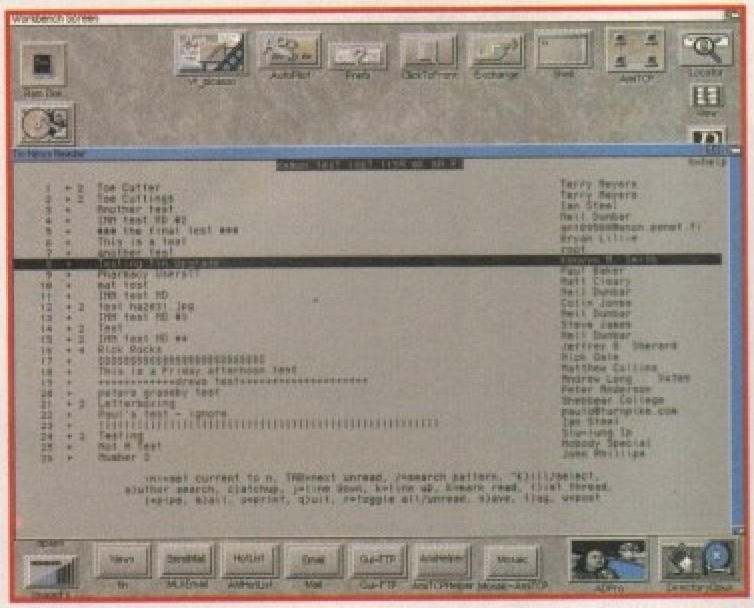
AmigaElm-v5.lha: aminet/comm/mail – 352K. The latest version of Elm. It can now automatically encrypt your mails if you are using PGP.

tin123.lha: aminet/comm/news – 181K. Updated version of Tin. Warning! Don't use the postnews command that comes with this version, stick with the postnews that came with AmiTCP (it should be 87 bytes in size).

grapevine-1_33.lha: pub/amiga/amitcp/extras – 243Kb. IRC or Internet Relay Chat client. Run your phonebills up even faster than 0891 numbers. This is from ftp.demon.co.uk.



The ultimate address book providing instant access across the entire planet. There are literally hundreds of thousands of individual places and related info just waiting to be browsed



A typical example of Tin trawling through just one of the endless supply of news groups just gagging for subscribers

easy to deal with. For a start, you have to actually get it. To do this you should type 'nntptransfer' in your open shell window when you are online. You will get one of two responses for this, either that Demon's newsserver is too busy and you should try again later, or that you are connected to it.

By default you will only download news for the demon newsgroups dealing with the Amiga. If you want to get stuff other than this, you will need to edit your AmiTCP:usr/lib/newsgroups file to include the groups you wish to subscribe to. If you don't know what any of the groups are called, you will need to download the ACTIVE list from Demon's ftp server. This contains all the newsgroups available through Demon.

If you want to subscribe to a whole hierarchy of news, for instance the comp.sys.amiga hierarchy, you can put an asterisk as a wildcard as follows:

```
comp.sys.amiga  1 comp.sys.amiga.* 1
```

This will subscribe to the newsgroups comp.sys.amiga and any subordinate ones such as comp.sys.amiga.graphics, comp.sys.amiga.hardware, and comp.sys.amiga.marketplace, etc. without you having to type them all in by hand.

Once you have edited this file to your satisfaction and run nntptransfer successfully, it is time for you to start reading the news you have downloaded. To do this you should run the Tin script in your bin directory. This should open a console window which will probably ask you if you want to subscribe to something (the name of the first newsgroup you entered in your newsgroups file). Hit the 'Y' key for each question to subscribe to those newsgroups.

You should then get a window with a list of the newsgroups you have subscribed to, with numbers by their left-hand side. These numbers represent the number of articles in each group. To enter a group and start reading you use the cursor keys to move up and down, and the right arrow key to enter. Then you will be at article level, so use the up and down cursor keys to move through the articles you have to read, and the return key to read one. If there is more text than will fit in the window, use the down cursor key to get to the next bit, and keep using it because that will move you to the next article in the thread once you have finished with the current one.

TWO-SIDED STORY

A thread is a bit like a conversation in a newsgroup. One person starts it off, then another replies and so on. Moving through the thread ensures you get both sides of the story. You can come out of a thread by hitting the left arrow key. If you have subscribed to a binaries newsgroup you are going to want to join together several articles, save them as one piece and uudecode them.

Tin can do this easily. If you have four articles that are numbered [0/3], [1/3], [2/3] and [3/3] in the subject line (or title), you can ignore the one that says [0/3] – that's just a description of the rest of the articles. For the others, make sure the cursor is on the [1/3] article and hit the 't' key for 'tag'. This will move the cursor down a line and put a little number 1 next to the title of the [1/3] article.

If the [2/3] article is next you can hit the 't' key again and proceed onto the [3/3] article. If not, position the cursor on the [2/3] article and hit it. Once you have all three with the numbers 1, 2 and 3 respectively by their titles, you can hit the 's' key for 'save'. You will then be asked what you want to save, so you should press the shift key down and hit the 't' key again for tagged articles.

You will then be asked for a filename for the files. If they are a split uuencoded file you can just type 'temp' as a filename, as the individual files are unimportant. If the files themselves are important you can give them a descriptive name and Tin will automatically append a .1, .2, etc. And if these articles are uuencoded, Tin will let you uudecode them by choosing 'u' from the next set of options.

If you have chosen to uudecode the files, Tin will eventually ask you if you want to delete post-processed files, to which you will be able to happily answer yes. The files you have saved will appear in your Amitcp:usr/username/news directory.

If you have read an article you want to reply to, you have two choices. You can choose to reply by e-mail to the author (by hitting 'r' on the keyboard while reading the article), or you can follow up to the newsgroup (by hitting 'f' while reading the article). This will bring up your text editor containing all the text that was in the article (which can, and should in some cases, be deleted so you don't waste space) to which you can reply.

Once you have finished typing, you should save and exit, and Tin will check your article and let you either go back and edit it, forget it altogether or post it. When you have finished reading your news, you can quit Tin by repeatedly hitting the left arrow key until the Tin window disappears.

You might also, at this juncture, want to run Trimnews in your bin directory. I've put Trimnews into my tin script so that it asks me whether or not I want to trim my news articles every time I leave Tin, as follows:

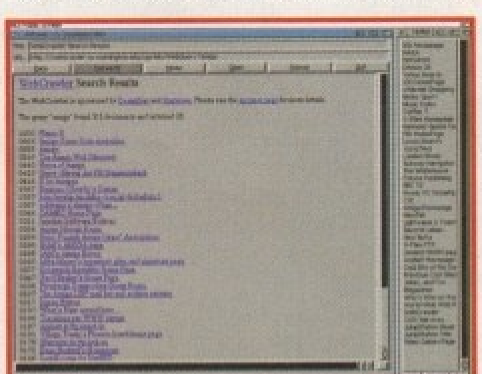
```
Ask "Do you want to Trim News now (y/N)?" If
warn trimnews else endif
```

Put these lines in before the end of the script, but after the line that starts tin.exe.

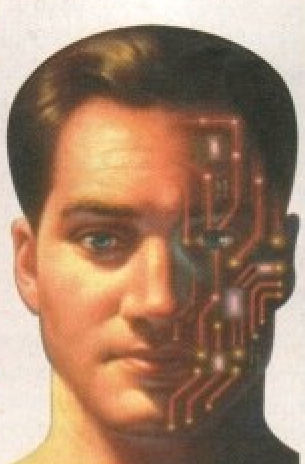
There is so much more to discuss but I'm running out of space here, so you'll have to explore mailing lists, batch ftp, ping, finger, telnet and much more by yourselves. Have fun and don't get too frustrated.

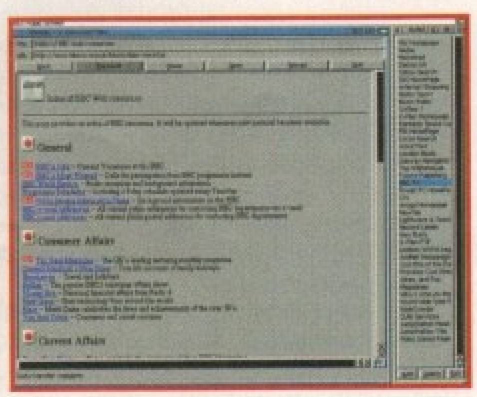
Finally, I'm just going to take a well-deserved opportunity to plug my little contribution to making AmiTCP easier to use. It's called AmiTCPHelper and gives you a button-based interface for connecting to the Internet and using ftp and mail, etc. It also gives you menu items to let you edit the various config files I have mentioned in the course of this article.

I would also like to thank all those people out there in net land who have helped me to the point where I could write this article. I'm not going to name them here (I don't want to inflate their egos too much), but they know who they are, and they'll be the ones helping you out too.

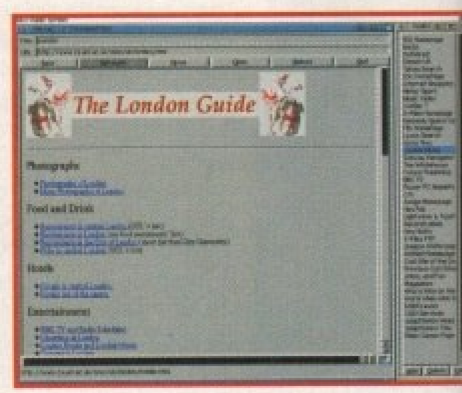


WebCrawler has to be one of the most important URLs for anyone running Amosaic





Everybody's getting in on the act. "Browsing the Beeb, it's not natural I tell you..."



Where, when and how, it's all up there in one form or another

SILICA ARE NOW IN 18 BRANCHES OF DEBENHAMS
SEE BOTTOM PANEL FOR DETAILS

QUALITY PERIPHERALS FOR THE AMIGA

AMITEK Friendly Technology

Designed to bring you high quality and performance at affordable prices, Amitek peripherals offer outstanding value-for-money. They are built to ensure easy fitting and trouble free operation - making them a pleasure to use. Amitek products are also thoroughly tested and very reliable, so reliable that we are pleased to offer a full two year warranty on most of the Amitek products detailed here.

AMITEK HAWK RAM UPGRADE & MATHS ACCELERATOR OPTIONS
FOR THE AMIGA 1200



INSTALLATION OF A HAWK RAM BOARD INCREASES A1200 SPEED BY UP TO 3x

- Plugs straight into A1200 trapdoor - No soldering required
- Upgradeable FAST RAM board to 1, 2, 4 or 8Mb
- Uses industry standard socketed SIMMs for easy upgrades
- Optional Floating Point Unit - 33MHz or 40MHz PLCC 68882 co-processor
- Comprehensive manual with illustrations
- Works with all A1200 and A1200HD computers
- Does not invalidate your A1200 warranty
- 2 year warranty

FPU SPEED COMPARISON
INCREASES OPERATION BY UP TO 40x
In FLOPS (FLOating Point operations per Second) Figures from AIBB version 6.1
Amiga 1200: 1.0 — 40MHz FPU 4Mb RAM: 40.27

AMITEK HAWK RAM UPGRADE BOARDS

1Mb RAM No FPU	2Mb RAM No FPU	4Mb RAM No FPU	8Mb RAM No FPU
£99	£129	£189	£329

OPTIONAL FLOATING POINT UNITS
Available with above RAM upgrade boards

33MHz PLCC FPU + Crystal	£59 INC VAT
40MHz PLCC FPU + Crystal	£99 INC VAT

AMITEK 1Mb SONY 3½" DELUXE FLOPPY DRIVE
FOR ALL AMIGA COMPUTERS



'Amitek's new disk drive combines an elegant design, high build quality and smooth performance in a very affordable package. Highly recommended'. Jason Holborn - Leading Amiga Journalist

DELUXE FEATURES
The Amitek drive has many deluxe features not included in other drives - check out the competition!

ANTI-CLICK
This feature stops your drive making whirs and clicks when the drive is empty and searching for a disk.

ANTI-VIRUS
This switchable mode stops track 0 viruses infecting the disk while in the drive. Unlike many other drives which have virus killers, this mode can be disabled, allowing some fussy copy protected software to run.

ADD MORE DRIVES
The Amitek drive is also daisy-chainable, so you can add further drives to your system, using very little power from your Amiga.

QUALITY SONY MECHANISM
Amitek took the time to source a mechanism that has all the features, quality and reliability that Amiga owners demand.

Details taken from models available MARCH '94	ANTI-CLICK	ANTI-VIRUS	ROBUST STEEL CASE	QUALITY SONY MECHANISM	TOP RATED CU-AMIGA MAY '94 90%	2 YEAR WARRANTY
AMITEK	✓	✓	✓	✓	✓	✓
CUMANA	–	–	–	–	–	–
ZAPPO	–	–	✓	–	–	–

- High Quality 3½" Sony Mechanism
- 2 Year Warranty
- Strong Metal Casing
- Built-In Anti-Click Feature
- Switchable Anti-Virus Mode
- Enable/Disable Switch
- 75ms Access Time
- Daisy Chainable Via Thru Port
- Low Power Usage
- External PSU Not Req'd

EXTERNAL DRIVE £59
INC VAT - DRI 1159
FREE DELIVERY IN UK MAINLAND

AMITEK FUSION VIDEO GENLOCK
FOR ALL AMIGA COMPUTERS



- High Quality Graphics And Video Mixing Desk
- FREE Scala HT100 Program Disk
- Add Titles And Special Effects To Videos
- Ideal For Home and Semi-Professional Users
- Supports All Standard Amiga & AGA Graphics
- Input And Output Composite Video Signals
- Switches Between Video Only, Computer Only And Mixed Graphics
- Hardware Fade Between Graphic And Video
- RGB Thru - Saving The Genlock From Being Unplugged When Not In Use
- Optional Chroma Key Unit Available Sept '95
- Comprehensive 16-Page Manual Plus Full Colour Sleeve

FREE! SCALA HT100 HOME VIDEO TITLING PROGRAM — INCLUDES FREE SCALA HT100 — WORTH £49 INC VAT

GENLOCK £99
INC VAT - VID 2100
FREE DELIVERY IN UK MAINLAND

AMITEK MAMBA MODULATOR
FOR ALL AMIGAS

NEW — 2 YEAR WARRANTY



The Amitek Mamba, External Modulator, makes an ideal replacement modulator for all Amiga owners. Everything needed is supplied. Like all Amitek peripherals, it comes with an easy to follow manual.

- User friendly manual included
- High quality design
- FREE RF cable supplied

MODULATOR £34
INC VAT - MOA 4200

AMITEK RAM UPGRADES
FOR A500/A500PLUS/A600 - 2 YR WARRANTY

CODE	DESCRIPTION	INC VAT
RAM 0505	A500 - 512K (No Clock)	£20
RAM 0510	A500 - 512K (With Clock)	£25
RAM 0520	A500PLUS - 1Mb RAM	£30
RAM 0605	A600 - 1Mb (No Clock)	£30
RAM 0610	A600 - 1Mb (With Clock)	£40

AMITEK POWER SUPPLY
FOR A500/A600/A1200 - 1 YR WARRANTY

This power supply is an ideal replacement unit, which can deliver 1.0 Amp on 12V and 4.5 Amps on 5V. More than enough power for a seriously expanded Amiga!

POW 0510 Amitek Power Supply Unit £29 INC VAT

AMITEK LOADER 1Mb INTERNAL FLOPPY DRIVES
FOR AMIGA 500/500PLUS & AMIGA 600/1200

These internal Amitek Loader replacement drives are ideal for users who wish to replace their existing internal drive.

The packs feature a high quality internal 1Mb, 3½" drive mechanism for the Amiga 500/500PLUS or Amiga 600/1200. All you need to fit your drive is included, plus easy to follow fitting instructions and 12 months warranty.



NEW

A500/A500PLUS INTERNAL DRIVE £34
INC VAT - DRI 3600

A600/A1200 INTERNAL DRIVE £44
INC VAT - DRI 3605

SILICA 1978 1995 — 17 YEARS SERVICE TO YOU

THE SILICA SERVICE

Before you decide WHEN to buy, we suggest you consider WHERE to buy and protect your investment with a purchase from Silica. With our unrivalled experience and expertise, we will provide all the extra help, advice and new product information you may need both now and in the future. Visit one of our stores, or return this coupon now and begin to experience the "Silica Service".

SILICA

NOW IN 18 BRANCHES OF DEBENHAMS STORES NATIONWIDE

- **ESTABLISHED 17 YEARS:** We have a proven track record in professional computer sales.
- **PART OF A £50M A YEAR COMPANY:** With over 300 staff - We are solid and reliable.
- **EXPERIENCED STAFF:** All fully trained in 'Customer Care'.
- **TECHNICAL SUPPORT HELPLINE:** FREE help and advice from a team of experts.
- **A FULL PRODUCT RANGE:** All of your computer requirements from one supplier.
- **WE PRICE MATCH:** We will normally price match any local high street store within a 3 mile radius on a "Same Product - Same Price" basis.
- **FREE CATALOGUES.**
- **PAYMENT:** We accept most major credit cards, cash, cheque or monthly terms (APR 23.8% - written quotes on request).
- **VOLUME DISCOUNTS AVAILABLE:** Business, Education and Government. Tel: 0181-308 0888.
- **MAIL ORDER:** FREE DELIVERY in UK mainland on orders over £40+VAT. Small administration charge (£2.50+VAT) on orders under £40+VAT.
- **21 STORES NATIONWIDE.** *Mini Stores carry a selected range only but products can be ordered in the stores via Mail Order

MAIL ORDER 0181-309 1111
PLUS TECHNICAL AND HEAD OFFICE
Silica, Silica House, Hatherley Road, Sidcup, Kent, DA14 4DX
PLUS BRANCHES AT:

BRISTOL	Debenhams - (3rd Floor),	St James Barton	0117-929 1021
*CARDIFF	Debenhams - (1st Floor),	St. David's Way	01222 341576
CHELMSFORD	Debenhams - (2nd Floor),	27 High Street	01245 355511
CROYDON	Debenhams - (2nd Floor),	11-31 North End	0181-688 4455
GLASGOW	Debenhams - (5th Floor),	97 Argyle Street	0141-221 0088
GUILDFORD	Debenhams - (3rd Floor),	Millbrook	01483 301300
HARROW	Debenhams - (2nd Floor),	Station Road	0181-427 4300
HULL	Debenhams - (2nd Floor),	Prospect Street	01482 325151
IPSWICH	Debenhams - (2nd Floor),	Westgate Street	01473 221313
LONDON	Silica	- 52 Tottenham Court Road	0171-580 4000
LONDON	Debenhams - (3rd Floor),	334 Oxford St	0171-580 3000
LUTON	Debenhams - (1st Floor),	Arndale Centre	01582 21201
MANCHESTER	Debenhams - (3rd Floor),	Market Street	0161-832 8666
PLYMOUTH	Debenhams - (3rd Floor),	Royal Parade	01752 266666
ROMFORD	Debenhams - (3rd Floor),	Market Place	01708 766066
SHEFFIELD	Debenhams - (3rd Floor),	The Moor	0114-276 8611
*SHEFFIELD	Debenhams - (L.Ground),	Meadowhall Ctre	0114-256 9779
SIDCUP	Silica	- Silica House, Hatherley Rd	0181-302 8811
SOUTHAMPTON	Debenhams - (1st Floor),	Queensway	01703 223888
SOUTHEND	Keddies	- (2nd Floor), High Street	01702 462426
*THURROCK	Debenhams - (1st Floor),	Lakeside Centre	01708 863587

COMPUTER SHOPPER 1994 Awards WINNER Best Software Delivery Service

COMPUTER SHOPPER 1994 Awards NOMINATION Best After Sales Service

To: Silica, AMCOM-0595-213, Silica House, Hatherley Rd, Sidcup, Kent, DA14 4DX

INFORMATION ON AMITEK PRODUCTS

Mr/Mrs/Miss/Ms: .... Initials: ....
Surname: ....
Company (if applicable): ....
Address: ....
.... Postcode: ....
Tel (Home): ....
Tel (Work): ....
Which computer(s), if any, do you own?
213N

E&OE - Advertised prices and specifications may change - Please return the coupon for the latest information.

Software Expressions

Established 1990

£1.00 per disk

85p per disk for 25 or more

Introducing some of the best public domain & shareware software. These are high-quality non-copywritten disks at a fraction of commercial prices

All disks are compatible for A500/A500+/A600/A1200, except (N) which indicates not compatible for 1200

BUSINESS SOFTWARE

B001.....A-Gene (1 meg).....Trace your ancestors
B098.....Database Master.....Comprehensive AMOS database
B134.....Ami Cash.....Best accounts package around
B136.....Amibase Prof.....Excellent database
B137.....600 Business Letters.....Pre-written script for business correspondence
B140.....Text Engine.....Excellent word processor
B152.....PC Task.....Emulates IBM + PC programs
B153.....File-a-fax.....As it sounds
B154.....QED.....Beginners word processor
B165.....A-graph.....Creates bar graphs
B175.....Text plus VERSION 4.....Excellent word processor
B178.....(2 Discs) Analitic ALC.....(2 Discs) Best spreadsheet available
B232.....Cheque Book Account.....Keep tabs on your expenditure
B237.....Stock Analyst.....Analyses the share market
B240.....Little Office.....Word Proccessor, Database & Spreadsheet
B242.....Budgets 1.34.....Accounts Manager

EDUCATIONAL

(N.B. This includes some games)

E033.....Education 1.....Learn German
E162.....The Bible (4 diks) (N).....The King James Version
E164.....World Databank.....Creates maps of the world
E180.....GCSE Maths.....Syllabus taught disk
E185.....Astronomy.....Calculates positions of planets
E194.....Total concepts.....Learn about dinosaurs
E212.....Back Talk.....Advise on Commonback Complaints
E239.....Dunks DTP.....Desktop Publishing for Kids
E234.....Colour The Alphabet.....Educational spelling game
E271.....The Highway Code.....All you need to know
E272.....Junior Maths.....Education for Kids
E023.....Electronic Train Set (1 meg).....Construct own train set
E043.....Learn and Play 1.....Good for the kids. Blackboard maths. etc.
E044.....Learn & Play 2.....More fun for the kids
E079.....Treasure Hunt.....Great Kids game
E086.....Wraithed One.....Good general knowledge quiz
EG162.....Storyland 2 (N).....Create a childrens adventure
E301.....Japanese dictionary (2 disks).....Good introductory tutorial
E298.....States of Europe.....Information on this continent. Good
E299.....Communicate.....Learn how to use sign language

CREATIVE

C112.....Slide Show Creator.....Create your own slideshow
C130.....Label Designer.....Various label printers
C142.....Super Fonts.....Lots of Super Fonts
C160.....Deluxe Paint Tutor.....Enhance your knowledge of this
C184.....Turbo-titler.....Sub-titles video animations
C186.....S-Movie.....Video text editor
C189.....Magnetic pages.....Create a disk magazine
C190.....Shadow demo maker.....Create your own demo
C191.....Beatrix Potter.....Clip-art program
C198.....Clip-art.....Valentines and weddings
C199.....Clip Art.....For New Year, Easter & Birthdays
C206.....ABC Adventure Creator (N).....Create your own adventure games
C230.....Illinois Labels.....Label Printer
C231.....Audio Animation Studio.....Create Cartoons
C236.....Word Power.....Solve crosswords & anagrams
C238.....Font Farm.....Variations of fonts available
C253.....Assassins.....Graphic utilities compilation. Enhance your Amiga
C256.....Print studio.....Multi purpose printer utility
C258.....Garden designer.....Create your own garden excellent graphics
C261.....X Beat.....Drum sampling & Drum machine

MISCELLANEOUS UTILITIES

M179.....Calorie BaSe.....Work out your own calorie intake
M204.....Race Rator (N).....For horse racing information
M210.....Pools Pools Version 2.....Work out your winnings
M211.....Training Log.....Keeping fit
M233.....Engineers Kit.....Check your Amiga System
M243.....D-Solve.....Crossword-complete with two crosswords
M244.....Lockpic V2.0.....Uncover copy facilities
M245.....Relo Kick V1.4.....Latest D Grader for A1200
M251.....Procad Electroid.....Circuit design drawing program
M252.....Dividends Winner.....Work out winning lines
M257.....Power Copiers (N).....Eight of the best PD copiers around
M262.....Essential Virus Killers.....Kills all the latest viruses
M280.....Cop the Lot.....National lottery helper!
M299.....Tee to Green.....Excellent golf-scorer

DEMOS + RAVE

D058.....Enterprise leaving dock.....Famous animation
D075.....Girls of sport.....Pretty shots of talented girls
D148.....The Run (1 meg).....T. Richter's car-chase animation. Good
D166.....Star Trek Animations.....Anims. of USS Enterprise
D177.....Star Trek Animations.....Agatron no.17 More like above. Good
D280.....Jesus on "E's" (2 disks) (N).....Excellent rave music
D282.....How to skin a cat.....Amusing demo
D287.....Calendar Girls.....Slideshow
D312.....Rave Vision.....Rave music & Graphics
D313.....Techno Warrior.....More of the same
D314.....Nine Fingers (2 disks).....Good. Sequel to State of Art
D099.....Jesus Loves Acid (N).....Brilliant!
M152.....Rave Length.....3 Rave Songs

MUSIC

M084.....Pink Floyd.....The Wall remix
M102.....No Limits (2 Disks).....Quality music compilation
M151.....Motiv-8.....More catchy tunes
M302.....Wigfield.....Saturday Night mix
U244.....Sound Tracker Samples (4 Disks).....100's of sounds for sampling
U249.....Sound Effects.....Different samples for music making
U062.....House Samples.....Drums & Synthesisers etc.

ADVENTURE GAMES

Ad005.....All New Star Trek (2 drives, 2 disks).....USS Enterprise classic. Best one
Ad007.....American Star Trek (2 disks) (N).....Jim Barbers graphic adventure
Ad014.....Adventure Solutions (2 disks).....Loads of hints of commercial games
Ad019.....Dungeon Delver (2 disks).....Difficult adventure quest
Ad065.....Pixie Kingdom (2 disks).....Tricky adventure game. Good
Ad219.....Space Rescue.....Guide Spaceship through Terrain
Ad222.....Neighbours Adventure.....(2 discs) Bring Paul Robinson to court
Ad223.....Wizard Wars.....Graphics Adventure
Ad245.....Iron Clads (2 disks).....Graphic adventure
Ad250.....Atlantis.....Excellent Adventure Games
Ad326.....Wibble World Giddy.....Really good platform game

ARCADE GAMES

A010.....Breakout.....Classic bat & ball game
A011.....Blizzard.....Horizontal shoot-'em-up. High quality
A053.....Mayhem.....Brilliant shoot-'em-up
A110.....Ladybug.....Similar to Pacman
A157.....Quadrix.....Difficult puzzle game
A171.....Top Secret.....Quality platform game
A176.....White Knight.....NEW Excellent shoot'em up game
A180.....Tank Attack (N).....World War 2 Simulation
A207.....Flagcatcher.....Find the flags. Very addictive
A209.....Games Galore Ten (N).....14 excellent games
A215.....Battlements.....Hunchback game
A225.....Addams Family Quiz.....Quiz on cult TV programme
A243.....Tetren.....Excellent Tetris clone
A247.....Quiz Master.....Quiz which includes Editor
A255.....Amos Games.....5 Games including Glassback
A306.....The Funhouse.....3 games including Enigma
A308.....Gush.....Very similar to pipeline
A309.....Smurf Hunt.....Find the Smurf
A310.....Zalycon (2 disks).....Space shoot'em up
A327.....Tetris Pro.....Tetris game with exceptional variants
A328.....Calculus Combat.....V. Good missile command type game
A334.....Crazy Sue 2.....Popular platform game
A338.....Project Buzz Bar.....Excellent asteroid type game
A340.....Depth Charge.....Submarine game
A341.....Earth Invader.....The best space invader game
A350.....Spitfire Assault.....Shoot 'em up game
A401.....Assassins 219.....Chopper Attack, Route 66, Gimme 5
A402.....Assassins 220.....Age of Rock, Commando Raid, Hearts
A403.....Assassins 218.....Bomber 2000, Black Dawn
A404.....Assassins 217.....Mangled Fenders, Maze and Cubik

SIMULATIONS

Sim071..Return to Earth (1 meg).....Space adventure
Sim102..Simulation 1 (1 meg).....Recommended. 5 games including Metro
Sim109..Wheel of Fortune.....TV Quiz, computerized
Sim124..Napoleonic Warfare.....High-quality simulation
Sim139..Battle of Britain.....Defend the nation
Sim143..Card Shop.....Well presented card games
Sim217..Act of War.....Excellent strategy game
Sim218..Roulette.....Casino Classic
Sim220..Sub Attack (N).....Also landmine + bomber
Sim224..Stratigic Games.....3 excellent games
Sim302..Micro Market.....Stock exchange game
Sim377..Life.....Excellent strategy game
Sim410..Island.....Excellent board-game. Build hotels & money
Sim414..Diplomacy (N).....Classic, similar to Risk
Sim415..War (N).....Top-quality 8-bit strategy

SPORT

Sp170.....Amos Criket.....'Owzat!
Sp208.....Grand Prix Simulator.....Excellent
Sp256.....Slamball.....Management game of US football.Type Sport
Sp263.....Soccer Cards.....Simplistic league-based game
Sp299.....Top Of The League.....Addictive football management game
Sp303.....Strike Ball.....Amos written baseball type game
Sp307.....18th Hole (2 disks).....Excellent golfing game
Sp325.....Mister Men Olympics (2 disks) Excellent game for disks as reviewed in Amiga Computing
Sp337.....Super League Manager 2.....Updated soccer management game
Sp372.....Road To Hell.....Well-produced racing game
Sp373.....Wrestling (2 disks, WB2.0 upwards).....Good fun graphics
Sp376.....Unsensible Soccer.....Good football game
Sp411.....Stewards enquiry.....Horse-racing game

A1200 ONLY

U235.....Sleepless Nights.....Compilation of A1200 utilities
D285.....Fairlight.....29 meg of graphics on one disk
D286.....No point of sale.....Stinning French demo
D289.....State Of Art.....Famous quality demo
D290.....Raving Mad Me.....High quality music video
D291.....Lethal Exit.....Stunning demo
D294.....AGA Swimsuits (5 disks) IFF 256 colour pictures use with DPaint etc
D300.....Technotrack II.....More rave music
D301.....Retina.....Excellent Vector film demo
D305.....Utopia.....A1200 slideshow
D310.....Nigel Mansell.....AGA slideshow
G321.....AGA Klondike (3 disks).....Excellent patience card game
G322.....Giger Tetris.....Tetris clone
G323.....U Chess.....Brilliant chess game
G339.....AGA Megaball.....Brilliant breakout game
G372.....Mad Fighter.....2 player Street Fighter game
G373.....Kellog Land.....Platform game
G412.....Kiss the Canvas.....Quality boxing game. Many variants
G413.....Bacman.....A1200 Pacman version
G414.....Motorola Invaders (2 disks).....Brilliant space invaders

Blank disks

10 for £4.99

Mouse Mats

Deluxe Mouse Mats £2.75 each

CATALOGUE DISKS

75p each

Details of over 2000 disks in our library updated regularly

POSTAGE

UK orders : 75p
Europe : £1.50
World : £3.00

PRICES

PD....£1.00 per disk
90p each for 10 to 24
85p each for 25 or more
75p each for 50 or more

Send cheque/postal order made payable to :

SOFTWARE EXPRESSIONS

Dept. AMC, 18 Maple Road, Horfield, Bristol BS7 8RH

Access

Credit Card orders only

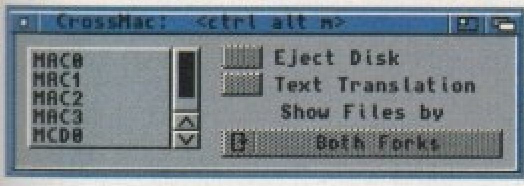
Tel: 01179 425987 (10am-4pm Mon to Fri)

VISA

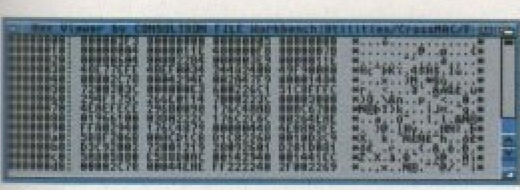
OUR TOP TEN BESTSELLERS

1. Superleague Manager
2. Essential Virus Killers
3. Cop the Lot
4. Road to Hell
5. Little Office
6. Act of War
7. Print Studio
8. Text Engine
9. Project Buzz Bar
10. Rave Vision

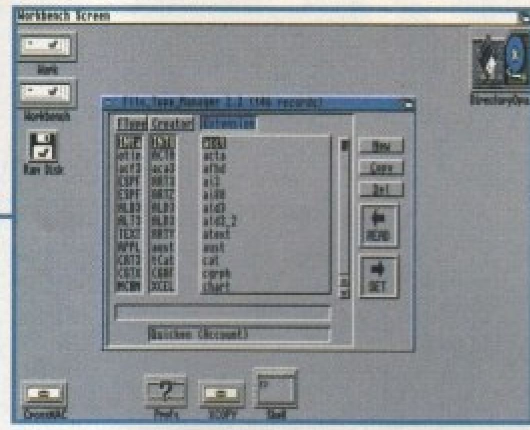
All 10 for £8.50 inclusive



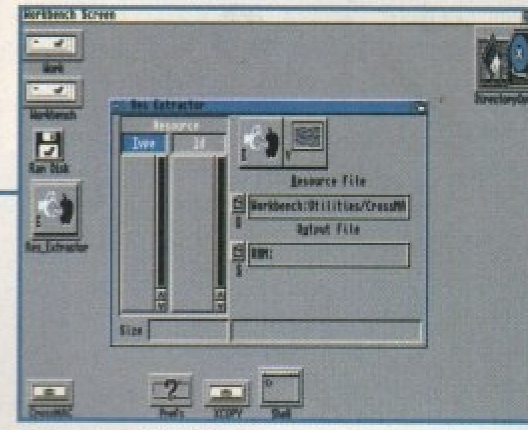
The CrossMac Commodity allows the user to optionally translate Mac text to or from the Amiga



VHex lets you view files or memory in either hexadecimal or plain ASCII format



The Finder Manager is a database program which lets you maintain filetype information for use by the Mac Finder system



Using this utility, information from Mac resource files can be viewed or extracted

Share and share alike

A software utility which allows your Amiga to read and write Mac disks with no hardware in sight. Hard to believe? Then read on

If there's one thing that computers excel at, it's in creating human frustration levels to otherwise unheard of heights when trying to get them to share information with ease.

Of course, there are lots of expensive hardware solutions to making these uncooperative beasts talk to one another, such as modems and network cards, but when it comes to the seemingly simple act of transferring the odd file via storage devices such as floppy disks, everything collapses into an archaic realm of incompatibility.

Things aren't hopeless however, after all, the Amiga is now on relatively good speaking terms with MSDOS PCs, being quite capable of reading and writing PC floppy disks, thus making the transfer of files quite easy between these two computers.

But, hiding away in its own little world, doing its own little thing in its own little way is the Macintosh computer. Apple's little babies have always been a breed apart and it's when the average Amiga owner attempts to try and transfer files between these computers that they encounter an unscaleable wall with the words "No trespassing. Apple employees only."

This is mainly due to the fact that the Macintosh file system is quite complex internally, and rightly so. This internal complexity is required to provide the end user with what is generally believed to be the most powerful, yet easy-to-use graphical user interface.

INSPIRING

Just look at all the window and icon-driven operating systems in use now, such as Windows on the PC and even the Amiga's Workbench, and you can see where their designers got their inspiration from.

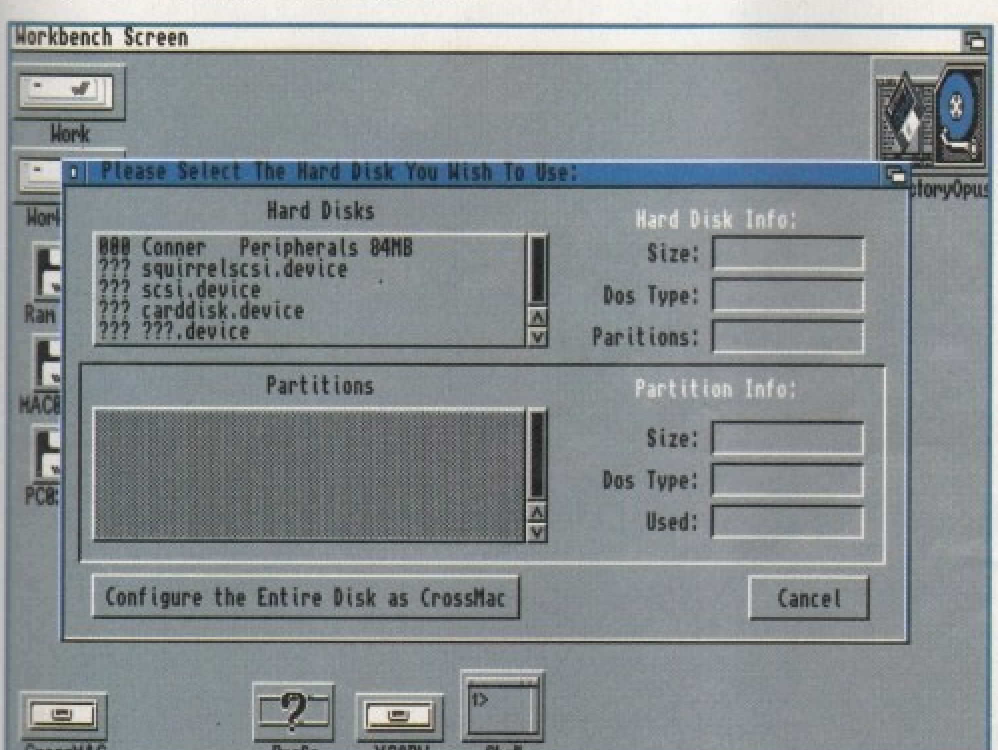
There is a sneaky way to circumvent this wall though. Utilities are available for the Mac which enable it to read PC formatted disks. So, armed with the fact that an Amiga can format a PC disk, courtesy of the PC0: device driver found in the DOSDrivers drawer within the Devs drawer on most Amigas, a working, but potentially lengthy and arduous detour can be found around this wall.

The problem is that in the somewhat questionable wisdom of the MSDOS operating system developers, they decided that filenames need never be more than eight characters long with a three letter extender, usually denoting filetype.

This creates a problem when copying files between the Amiga and the Mac. You see, the Amiga can safely handle 25 character filenames while the Mac toddles along nicely using up to 31. So, you can imagine the renaming session you will have to go through to get those filenames down to the eight character PC limit once on the PC disk.

PROBLEMS, PROBLEMS

Of course, you could just let the filenames be chopped off at the eighth character automatically when they are stored on the PC disk, but this has its problems. What, for instance, happens when you want to transfer 300 sequentially named animation files called FLYINGLOGO001, FLYINGLOGO002 and so on? I'll tell you what – chopping each of these down to the poxy PC eight characters gives you the filename FLYINGLO.GO0. Which means all 300 files will take on this name and ➤



Any hard drives attached to your Amiga can be configured for use as either a 'real' Mac hard drive or a simulated one

a hell of a lot of 'File already exists' messages will be generated, presenting you with the prospect of renaming the whole lot.

What would be much better is if the Amiga could simply be made to read and write Mac files just like it can with PC files. This usually meant investing in an expensive Mac emulator, like the Emplant. For simple file transfers though, it's ever so expensive.

Well, now there's a simple and, above all, low-cost way to do it. Some clever people at Consultron have come up with a software-only utility to allow your Amiga and a Mac to get on friendly speaking terms.

The name of this wonder of wonders is CrossMac and with it your Amiga to Mac file transfer problems disappear. CrossMac allows your Amiga to format, read and write Mac-format floppy and hard disks with ease.

Installation is simply a matter of running the installer script and once installed it works very well indeed, considering the complex way a Mac stores files on a disk. There isn't even the need for a chunky interface when copying files from an AmigaDOS drive to a Mac drive, thanks to the fact that CrossMac fully integrates itself into the Amiga's operating system.

Much the same way as you get a PC0: device driver, which when loaded displays a disk icon on Workbench for any PC disks in your Amiga drive, CrossMac provides device drivers called MAC0, MAC1 and so on. Copying files from an AmigaDOS disk to a Mac disk is then simply a matter of dragging the file icon to the Mac disk and vice versa.

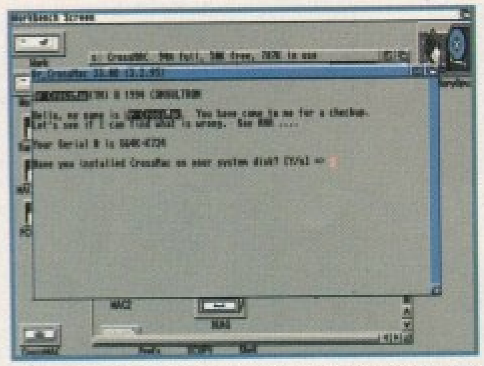
ADDED CONCERNS

There are a couple of things to bear in mind when using the CLI or third-party file utilities such as Directory Opus. CrossMac makes extensive use of the Comment field for an Amiga file in order to store important information.

When dragging files for copying via Workbench, this field is automatically included in the copying process. When using CLI though, you have to specify this explicitly using the COM option. File utilities usually have a 'Clone comment' option, so check your manual on how to set up your software to take this step.

There are also some neat file transfer facilities available when your files are traversing the Amiga to Mac road, such as the ability to recognise MacBinary files, providing transparent conversion into the correct type. Also available is a filetype database feature that automatically embeds the correct filetype and creator information for any data being copied from your Amiga to a Mac disk,

This wonder of wonders is CrossMac and with it your Amiga to Mac file transfer problems disappear. CrossMac allows your Amiga to format, read and write Mac format floppy and hard disks with ease



Should you find that CrossMac isn't working as it should, the Dr CrossMac diagnostic program should shed some light on your dilemma



As you can see, there are plenty of support programs and utilities to help make your Amiga to Mac file transfers easy and painless

thereby allowing the Mac operating system to fully recognise the file.

Probably the most common type of file which will be transferred between Mac and Amigas will be ASCII text files. CrossMac allows for intermediate text translation during the file copying process. This simple text translation feature converts some of the non-standard, or international, ASCII text characters.

This is activated by simply adding the] character to the end of any file which is being read or written, for example:

```
copy MAC0:filename.ext] to DF0:filename.ext
```

CrossMac also allows Amiga owners access to Mac-format hard disks and CD-ROMs. Two main types of Mac hard drive are supported. Type 1 is termed 'Real' and is a hard drive which has been formatted and partitioned with the Mac file system, either by a Mac computer or configured so that CrossMac may format it.

This is especially useful when using removable media hard drives such as the Syquest range, which utilise high capacity 'cartridges' which can be brought to another Mac for data exchange.

The second type of Mac hard disk is termed Simulated. This is essentially a Mac hard disk stored on an AmigaDOS partition. Such a simulated hard disk takes the form of a file which is a complete 'image' of a Mac hard disk. This is generally only useful if you plan to share your existing AmigaDOS drive as a boot partition for hardware such as Emplant.

A third type of high capacity disk is also available when wishing to read Mac formatted CD-ROMs.

To create or access the above drives types, CrossMac provides two utilities, 'ConfigDisk.CrossMAC' for setting up hard drives and 'ConfigDisk_CDROM' for accessing CD-ROMs. I have to admit to being somewhat sceptical of CrossMac being able to provide an Amiga to Mac file transfer capability which would remain transparent, as if simply using copying between standard AmigaDOS disks, but that is exactly what you get. If you have an Amiga with a 1.4Mb floppy drive that is.

You see, if your main activity will be transferring files via floppy disk, CrossMac only works without hardware when it is dealing with high density 1.4Mb disk drives. For those with low density drives, like those found in all A500s, A600s and A1200s – in other words the Amiga majority – the Emplant Mac emulator and its File Transfer utility, or Amax drives (not available in the UK to my knowledge), is required.

Boo hoo, I hear all you non high-density owners crying, that's no use to me then is it? Well, not all is doom and gloom. You see, we just happen to have been fooling with a neat bit of kit called Squirrel SCSI, a SCSI host adapter from HiSoft which lets you connect up to seven SCSI devices to your A600 or A1200 via the PCMCIA slot.

So I decided to check whether CrossMac would happily co-operate with the Squirrel when accessing Mac-format hard drives and CD-ROMs. And guess what? It did so admirably.

One particular scenario involved a Mac-only CD-ROM which contained hundreds and hundreds of high resolution 24-bit pictures. Armed with my Squirrel, I connected a CD-ROM drive to it, inserted the Mac picture CD-ROM into the drive and ran CrossMac's Config_CDROM utility. This duly took me through a few simple procedures to create a mountfile that allowed me to access the Mac CD-ROM using a drive icon on the Workbench to click on.

I then copied lots of the example pictures from the CD-ROM onto my Amiga hard drive, simply by dragging them from the Mac CD-ROM window into my open AmigaDOS partition window. I then fired up ADPro to view them without any hiccups whatsoever.

Ask the experts

CrossMac certainly delivers the goods. It is especially useful for we humble *Amiga Computing* writers here at IDG Media. All the editorial and artwork for our magazines are laid out using Macintosh computers. There is thus a constant need to transfer both text files and picture files from Amigas to give to our subs and art editors, and I have found that CrossMac is ideal for efficient trouble-free transfers.

So if you find yourself wanting a low-cost, efficient and, above all, trouble-free method of transferring files between your Amiga and a Mac, Consultron's CrossMac is currently the bees knees.

SYSTEM ESSENTIALS

RED = Essential **BLACK** = Recommended

Workbench 2.0 or higher

The bottom line

Product: CrossMac
Supplier: Hi Soft
Price: £99.95
Tel: 01525 718 181

Ease of use	**9**
Implementation	**9**
Value for money	**9**
Overall	**9**

OPTONICA

INFO NEXUS NEW!

£29.95

InfoNexus is a sophisticated file management system with integrated multimedia and network support. An ideal replacement for both workbench and CLI users InfoNexus features a full on line help system. As well as having the ability to move, copy, delete, rename files. InfoNexus allows you to view/hear/launch just about any file. InfoNexus is simply the best File/Data manager on the market today!

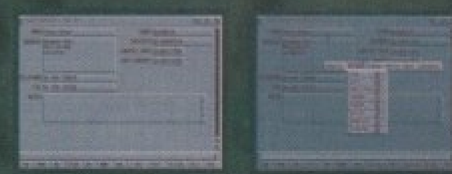


ALL AMIGAS 1 MEG RAM MIN

DATA NEXUS NEW!

£29.95

DataNexus is a very powerful and configurable, yet easy to use, flat file database. Its integral multimedia support for images, samples, text, music, animations, amiga guides, CDXL motion video, program & script launches make it ideal for just about any data storage and retrieval project. Full visual print layout and mail merge make DataNexus a must for your data.



ALL AMIGAS 1 MEG RAM MIN

SIMPATICA 2 + VTL

£350.00

Simpatica allows Amiga and 24 bit image sequences to be rendered to video tape frame by frame producing the same results as products costing over ten times as much, ie, smooth video playback at 25 frames per second. Simpatica has been on sale, and improving, for over four years so you are guaranteed a reliable product. Supplied with both hardware and the bonus program Video TimeLapse, there is no better choice for video professionals.



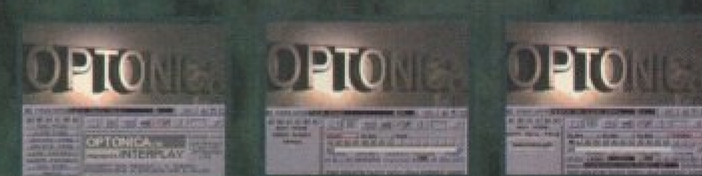
ALL AMIGAS 2 MEG RAM MIN

80% AMIGA USER INT MAGAZINE

INTERPLAY

£749.95

Interplay is a unique product for the Amiga, it allows you to produce CD32 applications to the very highest commercial standard and was written specifically for the CD32 so no other Amiga authoring system comes close. Interplay was used to produce the three highly acclaimed titles below.



ALL AMIGAS 4 MEG RAM + HARD DISK MIN : 8 - 16 MEG REC

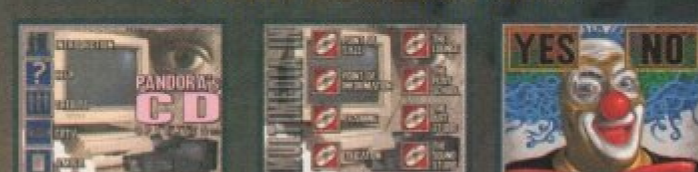
90% AMIGA USER INT MAGAZINE

93% CDTV USER GROUP NEWS

PANDORA'S CD

£4.99

Pandora's CD shows you just what can be achieved with multimedia on CD. An all original promotional title containing something for everyone, from educational productions to point of information, picture, texture, clipart and sound libraries, a jukebox, children's games and a sampler of Insight:Technology. Simply a must for anyone with a Commodore CD system!



CD32 - CDTV - A570

87% AMIGA FORMAT MAGAZINE

88% AMIGA USER INTERNATIONAL MAGAZINE

INSIGHT:TECHNOLOGY

£39.95

INSIGHT:Technology, lavishly produced by Optonica and published by Commodore, gives a fascinating look at modern technology with pictures, animations, photos, video, narration, text, music and sound effects, over 260 topics in all from the ball point pen to the space shuttle.



CD32 - CDTV - A570

87% AMIGA FORMAT

91% CU AMIGA

INSIGHT:DINOSAURS

£39.95

INSIGHT:Dinosaurs is the second in the INSIGHT series, a lavishly produced, highly acclaimed tile, rich in multimedia. Produced in association with the Natural History Museum, London, one of the world's leading Dinosaur centres of excellence, you can be assured that Dinosaurs is both technically correct and produced to the most exacting standards. Also features: DinoPaint, DinoQuiz and DinoPuzzle. INSIGHT:Dinosaurs has had the best reviews of any CD32/CDTV reference title so far (lowest mark 88%!), see for yourself why.



CD32 - CDTV - A570

92% FORMAT GOLD AWARD
91% CU AMIGA (TOP RATED)
96% CDTV USER GROUP NEWS
90% COMPUTER SHOPPER

SEND CHEQUE/PO TO OPTONICA LTD, 1 THE TERRACE, HIGH STREET, LUTTERWORTH, LEICS, LE17 4BA, UK. OR TELEPHONE 0455-558282 FOR MORE DETAILS. ALL PRICES INC VAT & P&P. PLEASE ADD £2 FOR P&P ON OVERSEAS ORDERS. DEALER ENQUIRIES WELCOME.

Home help

When buying your new Amiga, part of the package is a one year on-site maintenance contract. When this runs out, those with money can renew it or take out an extended warranty from a third-party company. However, Joe Public is often left high and dry, especially when his five-year old workhorse A500 gives up and decides to take early retirement. Repairing a faulty, ageing Amiga, or one just past its warranty via a recognised Commodore dealer can be a costly business, with a lot of time spent fault finding.

Frequently, the problem, albeit time-consuming to detect, can be quite simple. Naturally, this creates a niche for diagnostic software and hardware, so the cause of the problem can be discovered by the owner, in preference to paying an engineer to tackle the problem. Often, after running the diagnostics, the user may be surprised to find that the problem can be corrected quite simply by himself, without the need to involve a third party.

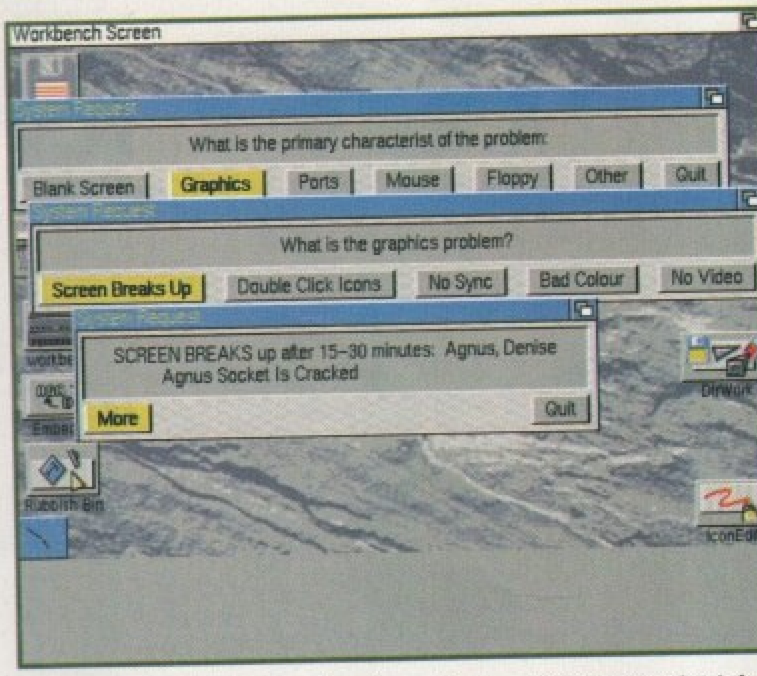
Evidently the advantages of these diagnostics are quite clear. It allows the user to assess the problem with their computer before taking steps to correct the fault. In black and white, this is a very nice idea but there are many different types of diagnostic kit that do varying things, and even more different types of problems to deal with.

DOUBLE DIAGNOSIS

Software for diagnosing different problems can be roughly categorised into two types. The first of these deals with physical hardware problems which may occur from damage to the computer caused by the user. The second deals with the general set up of the computer, i.e. if the system seems to be behaving correctly, with all the add-on devices functioning normally.

Daily use of an Amiga can involve the plugging-in and unplugging of expansions, a lot of turning on and off, and many disk-changes. Inevitably, there will come an event when something goes wrong, because of a user mistake. The computer error may manifest itself in many ways, for example printing may not work, or the keyboard misbehaves.

Diagnosing the fault can often involve examining the symptoms to find the cause, as many problems will have a common route. One piece of software that carries out this job is called ECS Diagnostics, which is shareware, by Charles Clayton. Although it offers no real diagnostic functions and will not detect a fault on your computer, it will serve as an aid to determining what the problem has been caused by.



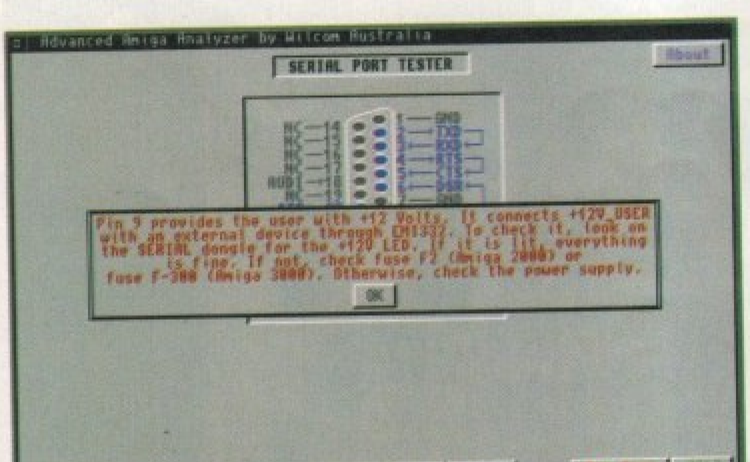
ECS Diagnostics finds the causes of common problems by asking questions until a final diagnosis is made

The process is simple, and is almost like a flow-chart. First it determines the area of the problem, and then the particulars. The program will then offer an explanation to what it thinks is the culprit, based upon the information you entered. For example, the problem may be related to the mouse, and the problem with the mouse may be because the right mouse button doesn't work. ECS Diagnostics will then tell you that the problem is with the Paula Chip.

ENHANCEMENTS

Although this software functions very well for the purpose it was intended, there is much room for enhancement. If it gave reasons for how the error was caused, or

The Advanced Amiga Analyser can be seen here, explaining the function and schematic routing of one of the pins of the serial port, after clicking on it



Hardware tests

Printers, modems and other peripherals failing to work are usually a result of damage to the ports on the rear of the computer. Advanced Amiga Analyser by Wilcom offers the ability to test for these problems.

The kit comprises of four 'D' type connectors, with LEDs protruding from the plastic casing, and a disk containing the software. The idea behind the hardware/software combination is to allow testing of all the functions of the I/O ports.

The normal procedure for testing is to have the Serial, parallel and gameport 'dongle' connected to each of the corresponding ports. When the computer is turned on, the LEDs will light up to show whether the power pins on each port are supplying a current. The software is loaded to display a diagram of the I/O port about to be tested. All the information about the port is displayed on the screen, with the description of each pin labelled.

One click with the mouse on a particular pin on the diagram will reveal more information about its use. By clicking on pin 1 of gameport 1, the program will tell you that it has four uses; for a digital joystick it is up, on a mouse it is the vertical pulse and so on. Information related to system schematics is also given, so having detected a fault with the particular pin, the problem can be localised.

On the same information window, the program states that pin 1 of gameport 1 is buffered through 74LS157 chip (U2, pin 11) and into the 8632 Denise chip (U201). Presumably, upon an error, either of these could be replaced.

One interesting feature of the diagram of the I/O ports is that whenever there is a sig-

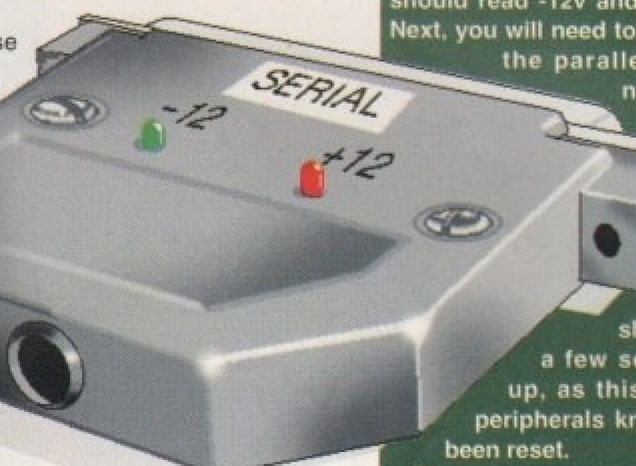
Tired of the niggling fault with your Amiga? Don't want to pay costly repair bills when the problem may be trivial? Wilf Rees investigates diagnostics, a possible answer to your problems

how it may be corrected, it may have more use as a guide to rectifying faults than a simple information tool.

Throughout the PD market there are many different programs that boast the ability to diagnose a fault with an Amiga. Unfortunately, some of these fall short of their claims. The most popular format for diagnostic software is a compilation of separate utilities, each testing a different function of the Amiga.

Engineers Kit is an example of this. It contains 20 different utilities for testing the Amiga's innards and the tests range from displaying a pretty HAM picture to benchmarking the computer. The disk includes A500/A2000 SysTest, which checks all Amiga functions, from sprite handling to the audio channels, in a diagnostic fashion. As this is Commodore's recognised testing software, it appears on most compilations under different guises.

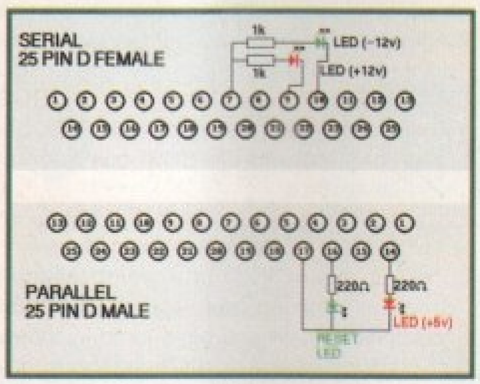
Although SysTest seems to analyse what appear to be rather crucial parts of your Amiga, the information it returns is particularly useless if there is an error. The results of each test are given by either a pass or a fail. If, for example, there is an error in the sprite testing, there is no additional information to explain the significance or origin of this error. The same applies to any sub-test of SysTest; a pass or fail is given ➤



This illustration shows what the 'dongle' should look like when finished. Note the LEDs protruding through the plastic casing



SCSI Tester will seek out any errors on a SCSI interface, and reports back into a log file. Here the program has displayed a requester showing information about the drive and interface



Here are the wiring diagrams for the serial and parallel port dongles

nal travelling through any of the pins, say from a mouse movement or button depression, the comparative pin is illuminated on the screen, depicting its function.

While any of the 'dongles' are attached to the computer, the test on the corresponding I/O port may be carried out. These tests carry out multiple data transfers over all of the appropriate pins, verifying they are working correctly. As each test on the ports is carried out, the process can be seen visually by the illumination of the pins on the screen. Like the gameport diagram, detailed information about the schematic routing of any of the pins on the port is available at the click of a button.

If an error occurs during the testing, an elaborate explanation is given to amend the problem. For example, one error that occurred during testing was: 'DTR is not transmitting proper signal. Check the trace from serial pin 20 to CIA-B pin 9. Note that it passes through the 1488 (U304), pins 11, 12 and 13 and EMI325. If the trace is OK, replace these, if the problem persists, replace CIA-B (U301, odd).'

Obviously, undertaking a task such as this is not for the faint-hearted, but in comparison to most of the other diagnostic software reviewed, at least, it offers some information on how to repair a fault. If you are experienced with electronics and willing to carry out repairs yourself, an Amiga Schematics guide would be necessary to locate the troublesome parts.

The software also facilitates disk and memory checking functions, which both seem to work adequately, with enough on-line information to explain any fault.

DIY diagnostics

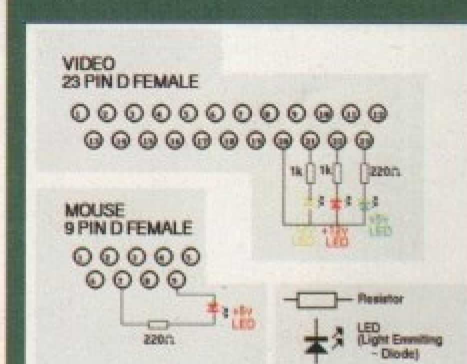
If you do not wish to splash out on the Advanced Amiga Analyser, you can test the output voltages with a meter, or make your own dongles with incorporated LEDs. The process is simple.

Using a volt meter, place the negative probe on pin 7 of the serial port. Touch pin 9 and then pin 10. If all is OK they should read -12v and +12v respectively. Next, you will need to take readings from the parallel port, using pin number 17 as a ground. Test the voltages on pins 14 and 16. Pin 14 should read +5 volts and pin 16 should read +5 volts a few seconds after boot up, as this is the line to let peripherals know the Amiga has been reset.

The test for the video port uses pin 20 as a ground. Testing pin 23 should give a +5v reading and both 21 and 22 will give -12v and +12v respectively. Finally, both gameports use pin number 7 as a ground. Probe pin number 8 to give a +5v reading on the meter.

If you are a master of soldering and intricate work, the push-on dongles may be the answer to testing your Amiga. For a full set of four dongles you will need four 1 Kilo ohm resistors, and 4 220 ohm resistors, plus three green LEDs, three red and one yellow. These components are mounted inside the plastic cases of 'D' type connectors, and four of these, including the connectors themselves, will be needed; 1 x 25 pin male, 1 x 25 pin female, 1 x 23 pin female and 1 x 9 pin female.

The LEDs can simply be pushed through holes drilled in the plastic casing. Follow the wiring diagrams for construction of the parts. Once constructed, these dongles can be used to test the power lines from each of the ports. Be careful not to plug-in and unplug these while the computer is switched on. All of the components for the dongles can be found at any good electrical/computer parts store. May all your diagnosis' be good ones!

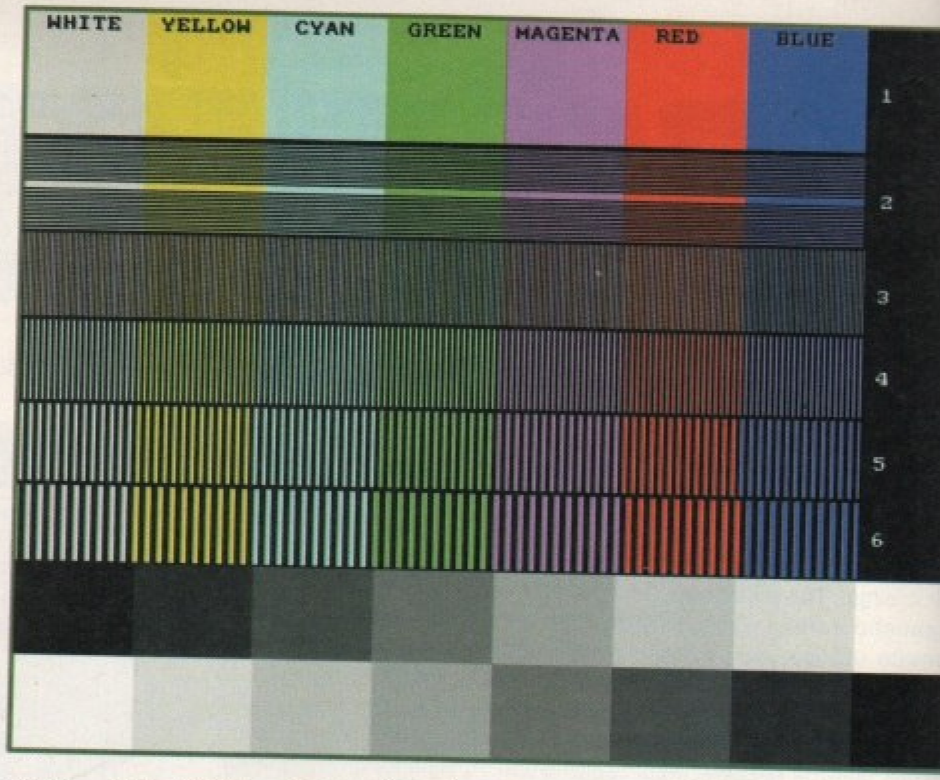


without further information offered.

The other utilities in the compilation are typical offerings for testing your Amiga. You can load the workbench 1.3 clock program if you wish which will display the correct time if everything is working okay. The keyboard, disk and joystick tests are perhaps the most useful of the three, but are not really necessary to determine that something does not work with any of these devices.

In general, this is one of the better diagnostic compilations, offering a higher degree of stability than its competitors – although the usefulness of some of the tests is somewhat dubious. It is also doubtful that this compilation can be called a 'diagnosis' disk, as most of the utilities will tell you there is a problem with the part tested, but give no further information on how to deal with it.

For example, there is no information explaining the fault on your computer if the double-buffered, pretty rotating cube test does not work. Maybe it is your disk-drive having an allergy to blue polygons!



The usefulness of the hi-res test-card on the Engineers Kit disk is somewhat dubious. What does it mean if the magenta turns out lime green?

TESTING, TESTING

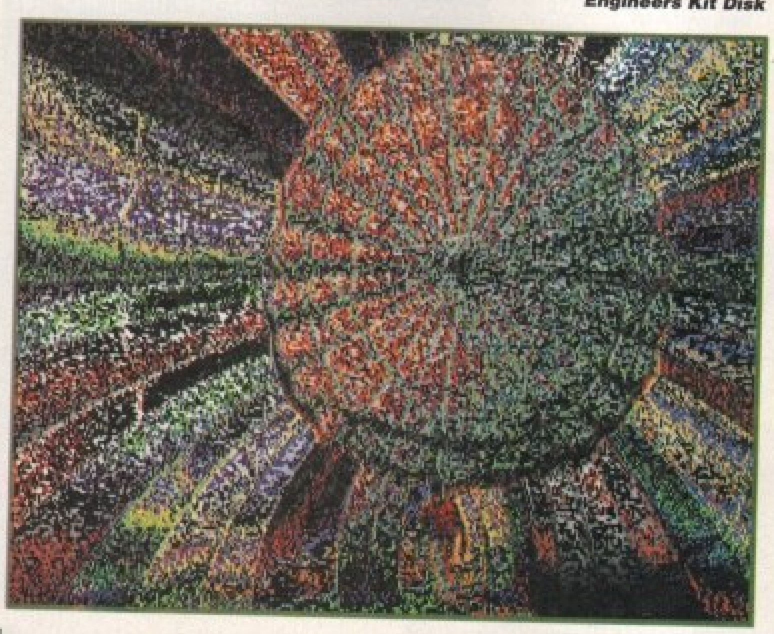
System Exerciser from PD Soft is an alternative shareware offering, with tests available for both the disk drive and the memory. Although both tests seem to function well, with errors detected properly, the presentation is quite poor, and the disk test program actually appears on the Engineer's Kit disk!

Amiga System Checkers Toolbox is an alternative compilation from Ground Zero and contains some interesting programs for testing your system. The package includes Amiga Intuition Based Benchmarks (AIBB V3) which helps give you a better idea what your Amiga is all about. If this is not enough, version 3.24 of SysInfo is also included to divulge further information on your machine.

Apart from these two utilities, the rest seem rather mundane and thrown together in comparison, including a keyboard matrix tester and Clock Doctor (which will not even see a clock even though there is one there!) There is also a joystick tester and various other system utilities and monitors. As per usual, the rather user-unfriendly A500/A2000 SysTest program is bundled in.

For those of you who own SCSI hard disks, and are having problems with them, a program to look at is SCSI Tester V2.0, by John Yeager. SCSI Tester will carry out a physical test of every sector on your hard drive, the SCSI bus in general. It is useful for determining problems with the SCSI cabling and SCSI device driver code, and faults present with the SCSI bus and any hard drives on it.

One of the pretty test pictures taken from Virus-Free PD's Engineers Kit Disk



INVESTIGATING

SCSI Tester V2.0 is a well-presented program, with an easy-to-use point and click interface. All you have to do is choose which SCSI device driver the program is to investigate. The drive you choose to examine is selected by choosing the appropriate values of SCSI ID, Board and LUN. The program then scans the SCSI bus and all the sectors of the chosen hard disk. All the results are displayed in a log file, which contains information on all the bad sectors found and additional information about the specifications of the SCSI Hardware.

Using SysInfo and other system performance monitors is useful if you own an accelerator or hard disk. By comparing your machine's benchmarks against others, it is possible to see what can be altered on your system to reach optimum performance. For example, you may have a SCSI hard drive attached to your system, but SysInfo says is not transferring data as fast as it cou be. To rectify this you could make sure th SCSI disconnect/reconnect is enabled.

If the controller is a GVP product, yo may require the DMA bus hold feature o the gvpscsi.device to be turned on – you have a higher performance hard dis attached. SysInfo will also tell you if th instruction and data caches are switche on, or if the system ROM has bee copied to 32-bit memory to speed-u access.

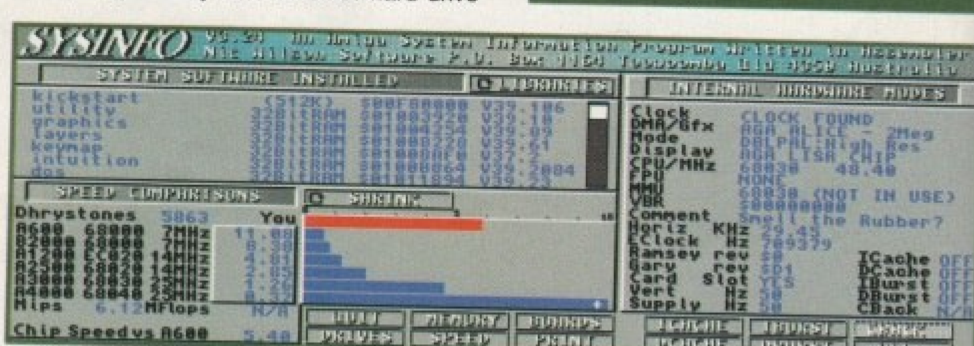
Suppliers

ECS Diagnostics:
17 bit software
Tel: 01924 366982; (disk no. 3347)

Engineers Kit:
17 bit software; (disk no. 2576)

System Exerciser:
PD Soft
Tel: 01702 466933; (disk no. U30)

Advanced Amiga Analyser:
Grapevine
Tel: 0101 914 357 2424;
Price: £49.95



Sysinfo is a useful tool for seeing how smoothly your system is running and checking performance, so you can carry out some fine tuning

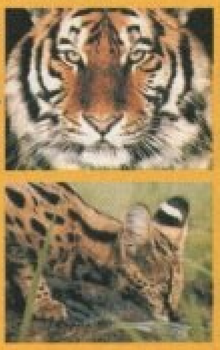
Weird Science

Tel. 0116 234 0682 or Fax. 0116 236 4932

CD Roms

Multimedia Toolkit CD

AN AMIGA CD, CDTV & CD32 APPLICATION



CONTENTS

OVER 10,000 FILES
500 24 BIT IMAGES
ALSO IN HAM8 & HAM
[illegible] COLOUR CLIP ART
2139 MONO CLIP ART
[illegible] SCALEABLE CLIPS
[illegible] MUSIC MODULES
2300 SAMPLES
[illegible] BITMAP FONTS
120 COLOURED FONTS
107 ADOBE FONTS
80 POSTSCRIPT FONTS
79 CG FONTS
214 ICONS

PC COMPATIBLE IN ISO9660 FORMAT

ONLY £ 19.95

CLIP ART CD



Over 550megs of Clip Art for Amigas and PCs. The most comprehensive collection of Clip Art ever for the Amiga range of computers. In total over 26,000 files. The following formats are catered for, B&W Iff Bitmap, Coloured Iff Bitmap, Proclips, EPS, Pagesetter, Pagestream, IMG, Corel Draw and coloured brushes. All are ready to use and easily accessible in subject directories.

CONTENTS OF CLIPART CD

15,000 + Mono Bitmap & 1300 Coloured
1500 EPS, 6900 IMG, 93 Pagesetter
290 Pagestream, 86 Proclips, 120 Corel
98 Printshop and 640 Brushes for Dpaint

A perfect companion for any DTP work.

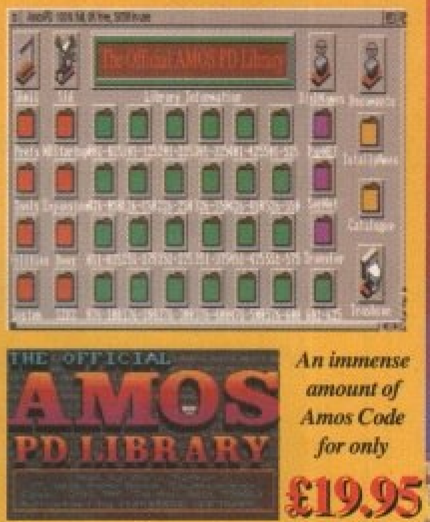
Clip Art CD only £ 9.99

Amos CD

THE OFFICIAL AMOS PD LIBRARY ON COMPACT DISC

The Official Amos PD Library is the largest source of Amos related source code and programs in the world today. The library is run by Len & Anne Tucker and is endorsed by Europress Software, the publishers of Amos and Amos Pro. This compact disc contains the entire library from disk 1 to 620, each one arranged in it's own directory and catalogued. The disc contains in excess of 33,000 files with over 1600 Amos source code files, 100 sprite banks, 260 Ctext banks, 800 samples, numerous music banks and several extensions to Amos & Amos Pro. This CD is truly a testament to the immense following that Amos and Amos Pro has achieved in the past few years and represents thousands of man hours of writing Amos code which will prove to be an invaluable source of help and tuition to the Amos user. The Amos PD Library contains many games and Utilities which will prove interesting to the Amos user and non-Amos user alike. Imagine the entire contents of a PD. Library on one CD.

Compatible with all Amigas



An immense amount of Amos Code for only

£19.95

FONTS CD

A complete CD dedicated to Fonts for the Amiga range of computers. Also PC compatible. Many formats are catered for, Adobe, CG Fonts, Coloured, Postscript, Prodraw, IFF, PCX, Pagestream, Truetype, Calamus and GDOS. Adding up to the most complete CD of Fonts for the Amiga ever. In total over 18,000 files in 900 directories. All ready to use and easy to load directly from the CD.

CONTENTS

2000+ Adobe & CG with PS Fonts
500 Bitmap, 190 Coloured, 240 Iff
139 Pagestream, 24 Prodraw
500 Truetype, 132 PCX
300 GDOS & 230 Calamus

AMIGA & PC Compatible

ONLY £ 9.99

SOUNDS TERRIFIC

A double CD pack containing over 1.2 Gigabytes of musical and sounds data for the Amiga and IBM PC computers. It all adds up to the most complete collection of sounds on any platform and will form vital part of any musicians CD collection.

CONTENTS

4600 Modules, 14,000 Samples
568 Sonix Scores &
4500 Instruments
302 Octamed/Med Modules
1190 Midi Files
1552 Voc & 642 Wav Samples
Utilities for both Amiga & IBM PC
Amiga and PC Compatible

ONLY £ 19.95



Assassins Ultimate Games CD

650 + games for the CD^{32}, CDTV & Amiga CD. Ready to run from a simple MENU system. 100% CD^{32} compatible. Also includes Assassins floppy disks 1 to 200 archived easily copied back to floppy. Workbench, Parnet & Sernet included.

ONLY £ 19.95

Network CD

SIMPLE NETWORKING TOOLS FOR AMIGA CD

The Network CD sets up a link between a CDTV or CD32 and any other Amiga. The CD32 or CDTV acts as a remote drive for your Amiga, allowing access to the vast pool of data available on CD Rom. The CD32 cable also available uses the AUX socket of the CD32 and comes complete with a keyboard pass through, thus still maintaining the ability to connect FMV or SXI addons. Network CD sets up a Workbench environment and disables the reset function, allowing the CD to be changed and access to any other ISO9660 CD.

CONTENTS

Parnet & Sernet
NComm & Term
Twin Express
Fred Fish 800 to 975
Amos PD 478 to 603
74 Utility Disks
PhotoCD Conversion
500 Images in 256 cols.

Network CD £ 14.99
CD^{32} Cable £ 19.95
Parnet Cable £ 9.99



AVAILABLE FROM ALL GOOD STOCKISTS
TRADE ENQUIRIES WELCOME

Aminet 3 *£ 19.95* 1.1 Gigabytes of data 1800 Applications 200 Games, 500 Songs 350 Demos 250 Images	***Aminet 4*** *£ 19.95* 1.1 Gigabytes of data over 330 megs of new files since Aminet 3. The latest from Aminet	***Aminet Box Set*** *£ 34.95* 4 CDs containing all of the files from the Aminet site. Includes new files not released.	***Meeting Pearls*** *£ 19.95* 600mb of top quality freeware. Utilities, images, music, games, and a lot more.'
17 Bit Phase 4 *£ 19.95* The very latest disks from the 17 Bit PD. library. Contents are in DMS format.	***LSD CD 1*** *£ 19.95* Complete with the LSD Legal Tools. Plus Music, Images & far, far more.	***LSD CD 2*** *£ 19.95* This ones so new and hot we haven't even got it yet. Rest assured it's very up to date.	***Demomania 1*** *£ 19.95* 600 mb of the hottest European Demos. A CD with a seriously bad attitude awaits you.
Hottest 4 *£ 19.95* Disks 3001 to 4000 from the PD Soft Library. Games, Demos, Images etc.	***Illusions in 3D*** *£ 9.99* 3D programs & images for the IBM PC and the Amiga. Random Dot Stereograms abound.	***Utilities 1 - 1500*** *£ 19.95* The utilities collection of disks from the PD Soft library. Over 650 MB of data in DMS.	***Professional Gifs*** *£ 19.95* *Over 5000 GIF images on many subjects. Selected as the best examples in the World.*
CDPD IV *£ 19.95* Fish 891-1000, AM/FM Collection, 600 MB of graphics, tools, music & fonts.	***Euroscene*** *£ 14.99* Drawn directly from Internet. 600 MB of Demos and Music from the FUNET archive.	***Desktop Video*** *£ 14.99* Objects, Textures, Fonts, Images & Video utilities make this CD a must buy for video use.	***C.A.M.*** *£ 24.95* 950 disks from the Club Amiga Montreal PD Library. Original content on 2 CDs.
Grafix Sensations *£ 19.95* Raytracing Tools & Objects for Lightwave and Imagine users. Textures also included	***Spectrum Sensations*** *£ 19.95* Spectrum Emulators for many platforms. With 100's of games. Regularly updated.	***Light Rom*** *£ 39.95* 3D Objects, Images, Scene files, Textures & Surface Attributes for Lightwave users.	***BCI Net*** *£ 19.95* Custom built interface accesses over 1 Gig. of files on many subjects from the Internet. Great

VIDEO CD

Now Available

Weird Science now stock a large range of Video CD titles. A small sample is listed below.

Addams Family Values 19.99
The Firm (3 CDs) £ 19.99
Naked Gun 1 £ 17.99
Sliver & The Krays £17.99ea.
James Bond Colection £49.99
Coming to America £ 17.99
A Fish Called Wanda £ 17.99
Ghost & Star Trek 6 £15.99ea.
Waynes World £ 15.99
Top Gun £ 15.99
Airplane & Alive £ 17.99ea.
Queens Greatest Flix £ 24.99
(NOTE. FMV card required)

£ 19.99 · £ 17.99 · £ 17.99

ZAPPO CD ROM DRIVE

Double Speed drive for the PMCIA slot on the Amiga 1200



The Zappo CD Rom drive for the Amiga 1200 provides full CD capability to the Amiga with the ability to read computer, music and photo CDs. CD32 emulation enables most CD32 titles to work with this system.

£ 229.99 includes 5 games CD32 Joypad and any TWO Weird Science Compact Discs.

NEW RELEASE FROM Weird Science

ANIMATIONS CD



2 CDs over a Gigabyte for £19.95

Animations of all types and sizes on this packed Double CD set. All the animations are ready to run directly from an Amiga Guide menu system. Full instructions are included on the Guide. This CD Rom set contains some of the most stunning artists work on both the Amiga and IBM PC and most of the animations will work on both platforms. Fire your imagination for £19.95

Telephone Orders 0116 234 0682
Access & Visa Welcome

Weird Science
Tel. 0116 234 0682
Fax. 0116 236 4932
1 Rowlandson Close
Leicester
Leics. LE4 2SE

UK Postage on CDs is £1.00 for the first item and 50p for each item thereafter. Next Day Delivery for Zappo CD Roms is £6.00 in the UK.
For International orders please Telephone or Fax first.

Subscribe to the top value

Subscribing to **Amiga Computing** is the only way to ensure your invaluable Amiga guide each and every month, as well as reaping a whole host of benefits linked with our latest subscription offer.

Save money and receive a gift!

Your subscription saves you over 13% on the cover price and safeguards you against any future cover price rises. You also have the choice of one of these great gifts, which we'll send you as soon as you return the subscription form.



Save over £30

UFO

Microprose's huge strategy game, UFO, puts you in the hot seat as the world comes under attack by an alien invasion. ● Add £3 to the price of subscription.

Save £29.99



K240

Gremlin's outer space strategy game gives you control over a whole galaxy of mining planets, where you can create and destroy worlds at the touch of a button.

Save £34.99

Heimdall II



The follow-up to the classic Viking adventure from Core Design takes you again into Nordic landscape in this arcade adventure and can be yours, absolutely free, when you subscribe.

Amiga Next Steps & Amiga A1200 Insider Guide books

Save over £29



A special two-book package including the essential Next Steps guide for all users who have mastered the basics, plus the definitive guide to Workbench and AmigaDOS on the A1200, packed with expert tutorials.

Two extra issues plus a smart *Amiga Computing* magazine binder

Save £15.93





guide for your Amiga!

The worry free solution

Taking out a subscription means you no longer have to make that monthly dash down to the newsagents, only to find you've missed the last copy of **Amiga Computing.** Each issue is reserved especially for you and delivered to you door, free of charge.



The easy option

Subscribing is made even easier by continuous quarterly direct debit. Not only can you forget about the subscription ever lapsing and the thought of missing an issue, but you can also spread the cost with a small payment each quarter.

SUBSCRIPTION HOTLINE for card orders
Tel: 051-357 1275 **Fax:** 051-357 2813

Amiga Computing subscription order form

Choose either a yearly (13 issues) or a quarterly subscription

● I would like the following yearly subscription:

New	Renewal		
☐ 9665	☐ 9668	UK	£44.99
☐ 9666	☐ 9669	EU	£69.99
☐ 9667	☐ 9670	World	£84.99
☐	☐	Canada/USA *	$98

● I wish to pay by:

☐ Cheque/Eurocheque/Postal Order payable to IDG Media

☐ Credit Card (Visa/Access/Barclaycard/Mastercard/Eurocard/Connect) Expiry Date ____ / ____

Card No

● Tick which free gift/special offer you want (not available to world subscribers)

9576 ☐ Two free issues and a magazine binder

9596 ☐ K240

9598 ☐ Amiga Next Steps & Amiga 1200 Insider Guide Books

9600 ☐ Heimdall II

9597 ☐ UFO *(Add £3 to the cost of your subscription)*

If you are paying by direct debit please pay additional amounts by cheque or credit card.

** Canada & USA subscribers send to: Europress (North America), Unit 14, Bysham Drive, Woodstock, Ontario, NT4 1P1, Canada. Tel: 519-539-0200, Fax: 519-539-9725*

☐ Tick this box if you do not wish to receive promotional material from other companies

● I would like a UK quarterly direct debit ongoing subscription

9671 ☐ £10.99 per quarter (Complete the form below)

Quarterly Direct Debit Instruction

AUTHORITY TO YOUR BANK/BUILDING SOCIETY TO PAY DIRECT DEBITS

Name of bank/building society ....

Address ....

..........Postcode ....

Name of account ....

Your account no.

Sort code

Signature(s) ....

Date ....

FOR OFFICE USE ONLY

Originator's Identification No. 8 5 1 4 1 2

Ref No. ....

Your instructions to the bank/building society:

I instruct you to pay Direct Debits from my account at the request of IDG Media. The amounts are variable and may be debited on various dates. No acknowledgement required. I understand that IDG Media may change the amounts and dates only after giving me prior notice. I will inform the bank/building society in writing if I wish to cancel this instruction. I understand that if any Direct Debit is paid which breaks the terms of the instruction, the bank/ building society will make a refund.

Bank/building society may decline to accept instructions to pay Direct Debit from some types of accounts.

● Deliver my magazine to:

Name (Mr/Mrs/Miss/Ms) ____________

Address ____________

____

Postcode ________ Daytime phone no ________

Send this form to: *Database Direct, FREEPOST, South Wirral L65 3EB.* *(No stamp needed if posted in UK.)*

Your subscription will commence from the earliest possible issue



What the press said about Tracksuit Manager......... "The best ever football managerial game ever, in the history of the world, no messing, very impressive." • "T.S.M. is one of the best games I have ever played." • "I am amazed at this one, someday all footy games will be made this way." • "T.S.M. is the most playable game of its genre, one of the most fun, compelling exciting and addictive games I've ever played!" • Wow! Now here's Tracksuit Manager 2 - and it's better still - in fact it's the **BEST**!

- LOADS AND LOADS OF FEATURES, HERE'S JUST A FEW!
- ALL ENGLISH LEAGUE AND CUP COMPETITIONS
- ALL THE MAIN EUROPEAN CUP COMPETITIONS
- UP TO DATE PLAYER LISTINGS
- VERY EASY ACCESS TO ALL INFORMATION
- COMPETE AGAINST YOUR FRIENDS TO SEE WHO CAN WIN THE CUP OR BE LEAGUE CHAMPIONS
- CREATE YOUR OWN SQUAD OF PLAYERS FROM THE UP TO DATE LISTINGS
- USE YOUR SCOUTS AND YOUTH SCOUTS TO SEARCH FOR NEW TALENT IN ENGLAND AND AROUND EUROPE
- TRANSFER LIST OR FINE PLAYERS FOR MISCONDUCT OR POOR PLAY
- KEEP AN EYE ON THE JOB NEWS FOR VACANCIES AT BETTER CLUBS
- ARRANGE PRE-SEASON FRIENDLIES TO GUAGE THE STRENGTH OF YOUR SQUAD BEFORE THE SEASON STARTS
- SIGN A PLAYER ON LOAN OR LOAN A PLAYER TO ANOTHER CLUB
- EXCITING IN GAME COMMENTARY

ALTERNATIVE SOFTWARE LIMITED, Department TSM, Units 5-7 Baileygate Industrial Estate, Pontefract, West Yorkshire, WF8 2LN. **Facsimile: 01977 790243**

This product is not endorsed by any football authority, official, team or player.

NAME:..........

ADDRESS:..........

CARD NO:

TEL:..........

FORMAT/COMPUTER:..........

TITLE..........

If after FIRST trying your local computer software retailer, you still have any difficulty obtaining our products then please send a cheque or postal order payable to Alternative Software for price plus 85p P+P (UK mainland) with the completed form stating format & computer, to the address stated, or telephone our CREDIT CARD HOTLINE (open 10am to 5pm Mon. to Fri.) on **01977 780767.**

amiga update

Instant expertise

Although there's been a number of video tutorial companies plying their wares to the Amiga world over the years, it must be said the overall standard has been pretty poor. Having said that, there is one very notable example, namely Desktop Images, a company from across the pond who've made their name via a range of highly acclaimed Lightwave and Toaster-specific tutorials.

When it comes to professionalism, presentation and overall quality, Desktop Images quite literally set a standard others rarely match. The question is, will that tradition continue with their latest efforts?

This month the spotlight falls on the very latest in video tuition for Lightwave and Studio 16

Studio 16 pro Audio for Video

Amidst the graphical euphoria that sometimes appears to completely engulf the Amiga, its success in the sound department often gets overlooked.

At the forefront of this success has been the SunRize Industries AD1012 and AD516 direct-to-disk sampling systems. It's no exaggeration to place both alongside the very best on any computer platform. As a result, Desktop Images have wisely set out to complement this amazing hardware with a tutorial video hosted by a professional Studio 16 demonstrator and a three time Emmy Award winning dialogue editor. Basically, the video is designed to offer all the insider knowledge needed to master the techniques required for pro-quality video post production.

In the first section, our anchor man and professional demonstrator, Tony Shannon, takes you through a step-by-step guide to adding a complete sound track to a movie trailer.

During the demo Tony adds sound effects, lip synchs vocals from the original rushes and narration, as well as a stereo musical backing track. After adding and synching samples, Tony moves on to the mix down process, detailing all the necessary skills needs to link tracks for automated fades and pans.



In short, after Tony's excellent introduction – which takes up roughly 3/4 of the tape – you should be well versed in the Timeline Cuelist, Digital Waveform Editor, Automated Mixer, Sample List and of course the Recorder. To put the icing, or rather the marketing on the cake, Tony's efforts are followed by a rather brief, but nevertheless informative overview by David Scharf.

During Mr Scharf's section you're taken through a basic tutorial on adding ambient sound and removing unwanted elements in the original rushes. In short, useful but not exactly inspiring stuff.

However, overall, and primarily thanks to Tony Shannon, the tape does offer some excellent advice and tricks of the trade. I've been running Studio16 for quite some time and would still be happy to cough-up the necessary cash for this kind of essential information. Highly recommended.

Product:
Studio 16 Pro Audio for Video
Product:
Pro Flying Logo Techniques
Supplier:
Premier Vision
Price:
£38.95 each
Tel:
0171 721 7050

Pro Flying Logo Techniques

As mentioned earlier, Lightwave and Toaster tutorials are what Desktop Images are best known for, and in an attempt to build on their existing success they've now targeted a specific, and often lucrative area for many commercial animators.

Flying logos may lack the glamour of Babylon5 or RoboCop but they're nevertheless the bread and butter that keep many an animator in business. As a result, who better to take you through the finer points than the maestro of the flying logo Mr Tony Stutterheim.

During Tony's inside guide you're shown some interesting tips on how to make more effective use of the cameras within layout. However, the video's real strength has to be Tony's explanation on how to create the kind of effects that make the difference between enthusiasts and professionals, while avoiding the sort of mistakes and production methods that can put hours, if not days on the job. As well as layout hints, Tony also offers some essential tips for making the most of modeller when creating actual logos and adding bevels. However it's back in layout where most of the real points are scored, with the most valuable information being how to produce streak effects, the use of null objects and the creation of the ubiquitous moving sheen effect.

Being an experienced Lightwave user, I must admit to being slightly disappointed with the overall content, as the majority of the tape will almost certainly run over familiar ground for anyone who's been using Lightwave regularly.

Having said that, there are some real pearls in among the more obvious examples – with the most notable being the aforementioned moving sheen effect. Like most, I've had a bash at this effect and met with less than favourable results. Fortunately, Tony does have an easy solution which I guarantee will leave many animators slapping their foreheads in a 'why didn't I think of that' manner.

Like it's counterpart, the tape concludes with a separate section, during Tony's closing address attention turns, rather ironically, to WaveMaker.

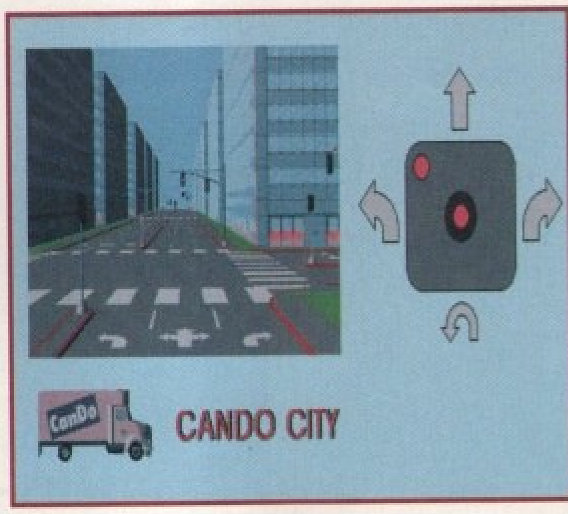
If you're a regular reader you may recall that WaveMaker is a standalone Lightwave add-on, designed by Tony, in conjunction with Axiom software. For those who are unfamiliar with the product, WaveMaker is a highly automated flying logo generator. The irony is that WaveMaker largely negates the need for any practical modelling and design skills when it comes to quality flying logo animation.

Admittedly, WaveMaker couldn't replicate the techniques covered in the tape, but after Tony's guided tour it's very tempting to put your new found knowledge aside and simply invest in a copy of WaveMaker.



Obviously, there's been some serious horse trading when it comes to content. Still, it must be said the overall package does deliver the goods, especially for those who are either new to Lightwave or make their money exclusively from corporate and commercial animation.

It might seem odd that a developer's tool like CanDo should be reviewed by a non-programmer like me, as opposed to, say, Phil South or Paul Overaa, both of whom have had a lot of good advice to give over the years when it comes to programming. But the thing is, that's what CanDo is all about. It gives people like me the ability to create standalone tools which can be given to anyone. Okay, it might not be as fast as a creation in C or Assembler, but hey, who cares? I haven't had to sit down and wade through heaps of technical jargon or Commodore ROM kernel manuals just to put a window on an Amiga screen.



Travel around an endless city courtesy of CanDo's amazing one-way system



Someone once told me that the national lottery was a load of balls...

You can with

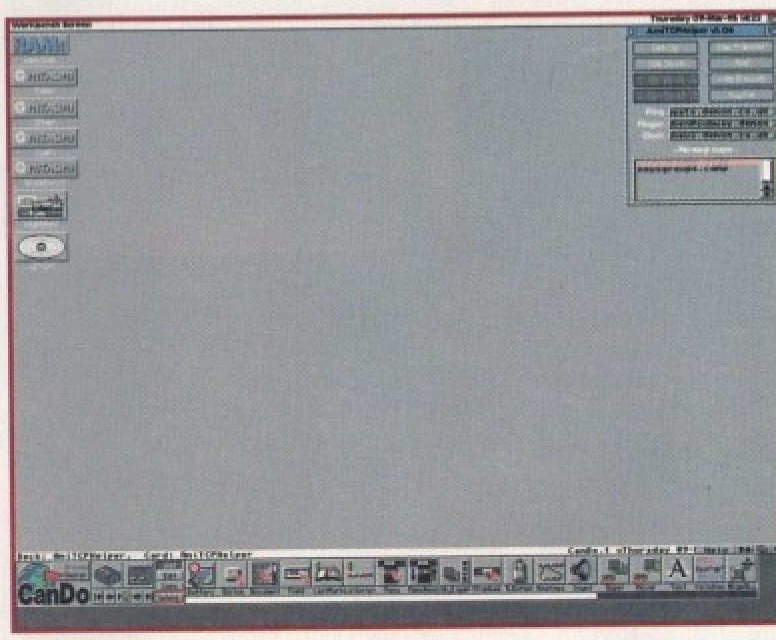
CanDo should need no introduction to regular readers of *Amiga Computing* as an earlier version of it was given away on the January cover disk. If you played around with it you now know that CanDo is an application developer that lets you build fairly complex programs without needing to know how to code.

SCRIPTING

All you need is a basic understanding of scripting very similar to AmigaDOS to create Amos-type, custom screen programs, or window-based, Workbench-bound tools. Well-known programs that have been made with CanDo include ProControl, the ADPro batch processor, and Sparks, an add-on for Lightwave.

So what does this new version offer by way of enhancements? Firstly, the interface has, once again, been redesigned. As shown in the pictures on these pages, instead of there being a static button bar there is now a dynamic list of options that can be changed to suit your tastes. If, for instance, you never program anything that needs a joystick, you can either remove the joystick option from the list, or simply move it to the end.

This main layer is not the only thing that has been changed – most of the individual requesters for these tools have been re-arranged and are now, for the most part, more sensibly arranged. The main purpose of this re-design seems to be an attempt to make CanDo look more professional; rather than using chunky buttons designed to appeal to those who still run their Amiga's on a TV, CanDo 3's interface is a strictly hi-res affair, even going as far as to support RTG graphics cards like Picasso. But this attempt to appear more professional is only partially successful.



CanDo's main interface in glorious technicolour

Although CanDo is now firmly oriented towards 2.x and 3.x development, it does not take advantage of all the added facilities offered by these versions of the Workbench. As an example, although the cycle gadget provided by CanDo looks and behaves like a normal AmigaDOS cycle gadget, the fact that programs like CycleToMenu won't work with CanDo-generated cycle gadgets is a bit of a give-away.

One of my main problems with earlier versions of CanDo was the lack of a decent script editor. This has still not been addressed in version 3, which still has an editor that can only cut, copy and paste complete lines which first have to be marked (two operations instead of one). My main wish for future versions of CanDo would be a user-definable, external text editor, with the button bar in the CanDo editor attached as a separate program running on the same screen.

As it stands at the moment, I am having to run Turbotext in the background to type in my text and then switch back and forth between Turbotext and CanDo to use the function tools. This is a real waste of my time.

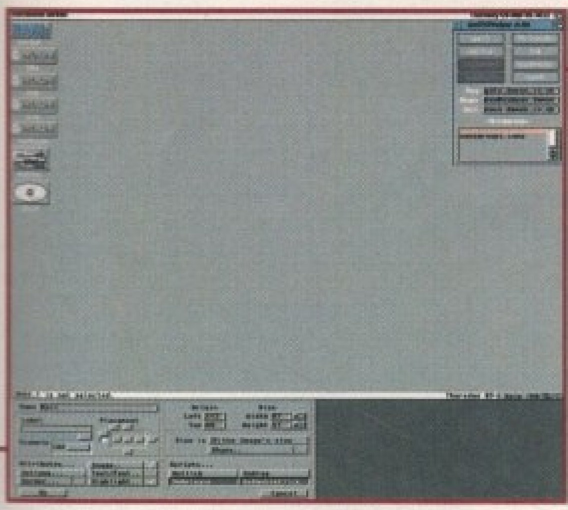
FIRST AID

The old-style help has been replaced by a large AmigaGuide document detailing all commands and functions, accessible by simply double-clicking on the word in question. However, with this leap towards standardisation, one of the more useful facets of CanDo's online help has been lost; that of being able to insert the correct command

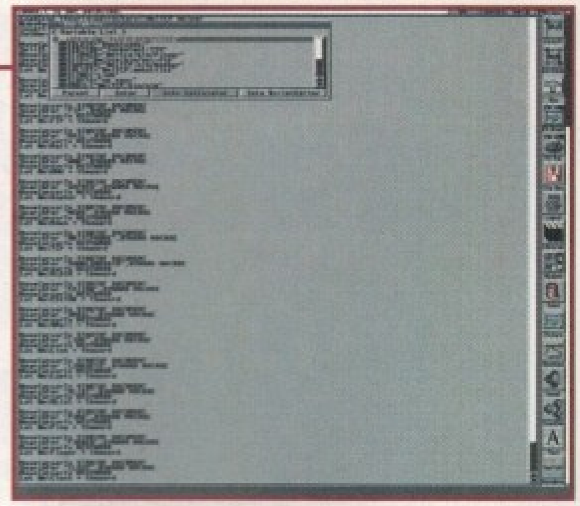
Standalone stuff

As from version 3, CanDo no longer supports true standalone programs without the user paying extra. If you want to create a public domain or shareware program whose registration fee is going to be less than $50, you are entitled to distribute the CanDo library with your program. This is a similar idea to MUI-based programs where a MUImaster.library is required before you can use the program. A 200k overhead might seem excessive if you are only using one MUI application, but when you have four or five running on your machine, all using the same library, it no longer seems such a sacrifice.

The other advantage is that you don't have to incorporate everything into your program itself – the library takes care of all those functions – so your program size is small and easy to download. Users writing kiosk POI systems or full-on commercial applications are required to pay for a runtime or special licence version of CanDo.



Editing buttons in your interface needn't be a pain, thanks to super button editor.



CanDo's not-too-hot script editor in action

CanDo

Ben Vost discovers whether or not the new version of CanDo lives up to its past reputation

template back into your script once you had thoroughly researched your topic.

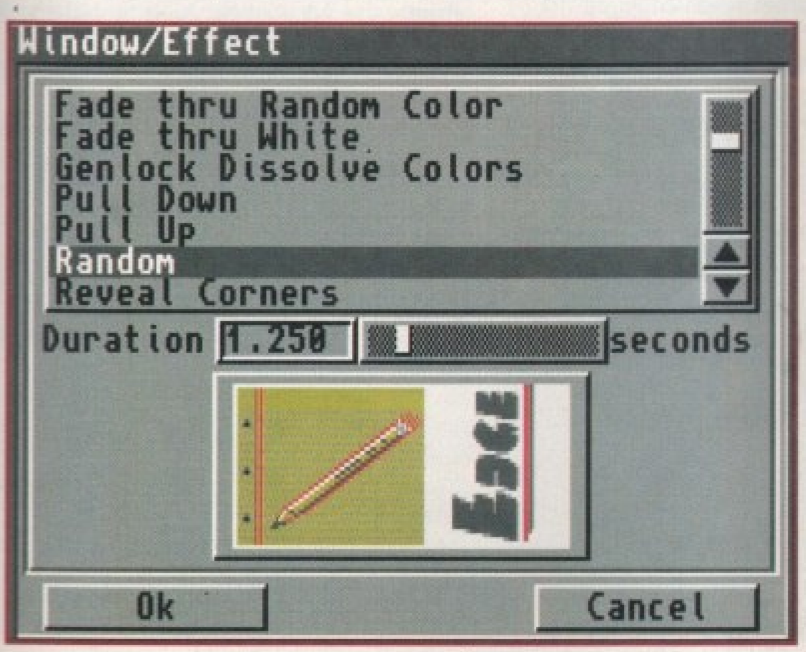
Hence the arrival of the Lexicon Assistant. This lets you use wildcards to set limits on which of CanDo's 448 commands and functions you wish to sort through, and clicking on the two buttons at the bottom of the window will either bring the AmigaGuide help document back up or insert the command into your script – usually with a helping line giving options for that command which is commented out of the script so it can do no harm.

As I didn't get a look at version 2 (or 2.5) of CanDo, I'm not really in a position to say whether the manual has changed since then, but it certainly has changed since the last version I own (which is 1.5). No more the spiralbound glossy manual. Now we have a ring binder containing 634 pages packed with closely-typed information, along with a separate Tutorials manual. It might just be me, but I found it really difficult to find what I was looking for in the manual as it seemed to be based on the AmigaGuide document.

If you just look up a topic in the index, say Documents, it will refer you to a single page, not the several I was expecting. This page will contain an overview of the Document tool and give you page numbers to refer to for each command relevant to documents in CanDo. In my opinion, my old version 1 manual dealt with this in a much better fashion, grouping all the document commands together alphabetically before moving onto another topic.

The manual that comes with CanDo 3 has an overview for each topic near the start of the manual and then an alphabetically-sorted section of every single command – all 448 of them. This means that if you aren't exactly sure what you

> CanDo is an application developer that lets you build fairly complex programs without needing to know how to code. All you need is a basic understanding of scripting



Clicking on the picture at the bottom of this window demonstrates the effect highlighted in the above box

Script editor tools

This is a list of all the tools available every time you enter the script editor. Most of them are there to save you from having to type in endless commands to achieve an effect, and will automatically enter code into your script.

ARexx – this tool looks for any ARexx ports currently open and lets you talk to them.
Bookmark – this is where you click to add a bookmark to the list.
BrushAnim – this tool lets you load, show and edit the path of a brushanim. The results are entered into your script.
Buffer – lets you work with all the buffers in your application.
Card – lets you insert various commands to do with the cards in your deck.
Coordinate – this puts a cross hair on your interface and when you click, enters the co-ordinates into your script.
CoordinateBox – this works the same way, only you draw out a box. The top left-hand corner co-ordinates are entered with the distances to the opposite corner into your script.
Dos – this lets you run external Amiga programs from within your CanDo application.
Effects,Brush – this adds transitional effects to brushes you are showing in your program.
Effects,Palette – this adds transitions to palette changes in your program.
FileRequester – this brings up a file requester in which you can choose a file. This filename and its path are then inserted into your script.
Layout – lets you flow text around your interface.
Librarian – this lets you build up a library of code modules that you might want to use in other areas of your program, or even in other programs entirely.
Objects – this tool lets you insert code into your script dealing with the objects (buttons, fields, documents, etc.) in your program.
Paint – this is a simple drawing program that lets you draw into your interface. CanDo then converts what you have drawn into code and inserts it into your script.
Picture – this brings up a file requester to let you choose a picture to show.
Routines – this behaves in the same way as the main toolbar version with the added benefit that you can directly insert the name of the routine into your script.
Sound – this tool lets you set the volume, channel and filename of a sound to be played.
SoundSequence – this is an expanded version of the above command allowing you to play modules or sequences of individual sounds.
Text – lets you print text into your interface.
Variable Browser – this brings up a list of all the variables in your program and their contents so you can insert them into your script.

New features

Tthere are many updated functions and commands as well as new ones in this version of CanDo . Below are just a few examples.

Improved

Border Requester; Font Requester; Config CanDo; Document Object Tool; Field Object Tool; Menu Object Tool; Proportional Object Tool; Timer Object Tool; Screen Definition; Window Editor; Window Options.

New

Editor Tools: ARexx Buffers; Brush Effects; Palette Effects; Librarian Objects; Variable Browser.
Object Tools: Align Object; BufferManager; LastScript Print; Text VariableManager.
Script Editor: Calculator; Help Menu (now uses AmigaGuide); Lexicon Assistant.

➤

need to know, you have to look in two separate places before you are guided to the right area. This might not be a problem in a 40-page manual (you could probably flip to the right page anyway, with practice), but in this monster it is quite a nuisance.

The resemblance of the manual to the accompanying on-line help is further reinforced by the fact that the entry for a command in the manual is exactly matched by that in the on-line documentation. There are no added examples or explanations which is a great shame as it can be quite frustrating to have to search through all that documentation, only to find that the explanation you were looking for isn't there – only a command template. I think my solution is going to be to get some dividers for my manual to at least make my searching easier.

BETTER BY DESIGN

The Tutorial manual is much improved over the rather simple examples provided with CanDo 1.5. There are complete script breakdowns, and the features demonstrated are, for the most part, a little more interesting and useful than showing a picture of a rabbit and a porcupine. They skip over certain features, but I think that in all my years of trying software tutorials I have never found one that explained absolutely everything, and I'm aware that other people might have different priorities.

One of the other features that was sorely lacking in my previous version of CanDo was support for system file requesters, confirmation requesters, and so on. In my old copy of CanDo, if I wanted to have a file requester for my programs I would actually have to make a separate 'deck' (which is what CanDo calls the programs it creates) that contained the file requester I would have to write myself, then call that deck up from my original program.

Well, now CanDo supports calls for ASL requesters and allows you to use the command AskForResponse, which puts a standard AmigaDOS requester on the screen, of the 'Are you sure you want to quit?' variety. These requesters are proper AmigaDOS ones and can have their choices selected with the left Amiga-V or -B keyboard combinations. If you are using ARQ then these requesters do pop up in the middle of the screen.

CanDo 3 now has a special effects feature which can be used for transitions between brushes, palettes or pictures, much like that which comes with Scala, and which takes exactly as long as you want them to – no matter whether you are using them on a humble A500 or the fastest A4000 going. In addition to its already good brushanim support, this feature will guarantee fans who want to further jazz up their presentations.

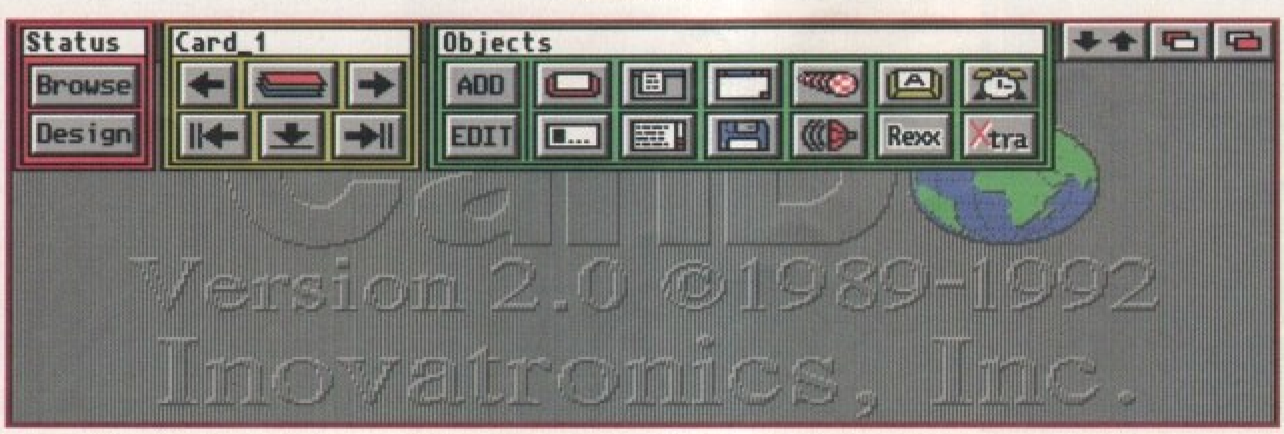
TUTORIALS

CanDo's brushanim support is amply demonstrated in two of the tutorial scripts provided. One is one of those practically ubiquitous lottery number picker programs, but this one is really nice as you can see by the picture on the previous page. The balls with the numbers on are actually all from one brushanim which shows a ball with the numbers from 1 to 100 on it.

CanDo then simply sets the brushanim to whichever frame is required to show the correct number. Simple and effective. The other tutorial is an interactive drive-through of an endless city, created by having brushanims for moving straight ahead, turning left and right and doing a U-turn.

But I don't want to cast too much of a downer on CanDo. It is probably the only way I am ever going to be able to produce a standalone program which could be run by anyone. It is an incredibly powerful program which can be used for things from the simplest button-based toolbar, through databases and spreadsheets to multimedia applications.

AC



A familiar interface, but under the skin it's all change for the all-new CanDo

Editor tools

CanDo's complete set of editors include:

Align Object – lets you neatly arrange the elements in your program on a grid basis.
ARexx – this tool is for defining a script that will occur when your program receives a message through its ARexx port.
Bookmark – this comes in very handy when you have a lot of scripts. In the script editor, one of the first buttons down the right-hand side is the Bookmark button. Clicking on this makes CanDo take a note of the script you are editing.
BrushAnim – this is for editing the BrushAnims that are going to be used by your program. It isn't used as a drawing package.
BufferManager – brings up a requester showing all current buffers and their contents and lets you play around with them.
Button – one of the most used tools. This lets you create buttons of all shapes, colours and sizes, which can be dragged, single-clicked or double-clicked on.
ConfigCanDo – basically CanDo Prefs. It lets you edit various aspects of the CanDo interface to suit your tastes.
Disk – this tool is for the creation of scripts when a disk is inserted into a drive or removed.
Document – Lets you incorporate a list view or scrolling text box in your program.
Field – this one lets you create text or numeric fields for your program.
GamePort – lets you determine what joystick or mouse actions do in your program.
KeyInput – lets you set keyboard-controlled events in your program.
LastMark – this jumps you straight to the last Bookmark you set, without having to use the Bookmark tool.
LastScript – this jumps you straight to the last script you edited.
Menu – this tool lets you create menus for your program which can be standard text-based ones, or contain images.
MenuRender – lets you perform a script before the menus are created for a program.
ObjectLayer – this lets you rearrange the relative depth of your buttons, fields, etc.
Print – this will print out your complete deck or parts of it, as you like.
Proportional – lets you create proportional gadgets (sliders) for your application.
RightMousebutton – you can attach scripts to a right mouse button event with this tool.
Routines – CanDo lets you have routines that are independent from the normal scripts and this tool lets you access them directly.
Sound – this lets you attach scripts to sounds played in your application.
SuperDuper – A tool to make copies of buttons, fields, etc.
SuperMover – this tool lets you move one or more objects around your interface using an x,y offset.
Text – this tool is for placing text into your program.
VariableManager – this brings up a list of the variables in your program and lets you manipulate them.



CRAZY DISK PRICES!! GUARANTEED

GREY-TRONICS LTD

LOWEST PRICES

BEST SERVICE

RAPID DELIVERY

SALES FREE CALL 0500 737 800

SALES HELPLINE 081 686 9973 / 081 781 1551

DISKS DISKS DISKS + LOCKABLE BOXES

100% CERTIFIED ERROR FREE

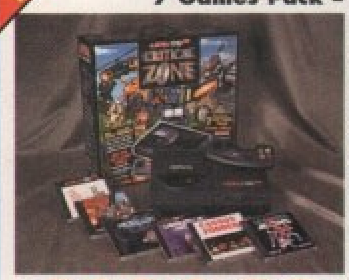
	Grade A+	Grade B	
50 3.5" DS/DD	£15.99	£15.49 + 100 cap lockable box	Add £4.00
100 3.5" DS/DD	£24.99	£24.49 + 100 cap lockable box	Add £4.00
150 3.5" DS/DD	£38.99	£38.49 + 2 x 100 lockable box	Add £8.00
200 3.5" DS/DD	£48.99	£47.99 + 2 x 100 lockable box	Add £8.00
300 3.5" DS/DD	£73.99	£69.00 + 3 x 100 lockable box	Add £12.00
400 3.5" DS/DD	£98.99	£92.00 + 4 x 100 lockable box	Add £16.00
500 3.5" DS/DD	£123.99	£110.00 + 5 x 100 lockable box	Add £17.50
1000 3.5" DS/DD	£229.99	£205.00 + 10 x 100 lockable box	Add £30.00

FREE LABELS + FREE DELIVERY BY PARCEL FORCE

AMIGA CD32

NEW PACK

7 Games Pack - Free delivery



£194.99

- SX1 Modular Expansion £187.99
- Keyboard for CD32 .... £36.99
- Disk Drive for CD32 .... £48.99
- CD32 to Amiga 1200 inc. software £34.99
- CD32 to Scart £11.99
- Competition Pro Pad £15.99
- Commodore Original Pad £8.99
- CD32 Lens Cleaner £9.99
- CD32 HiFi Lead £11.99

Add £2.00 p&p for accessories

3.5" DELUXE LOCKABLE BOXES

- 50 Capacity £4.05
- 100 Capacity £4.99

Add £2.00 p&p

3.5" STACKABLE BOXES

- 100 Cap drawer £9.99
- 80 Cap Banx Boxes £9.99

AMIGA 1200 PACKS
AMIGA 600 PACKS

CALL FOR LOWEST PRICES

SMART BUY

★ STARTER PACK £14.99 For: 10 Disks, Mouse Mat, Microswitch Joystick, 50 Cap Storage box, Disk cleaner

★ Games for A1200 USERS ONLY WHILE STOCKS LAST

- SYNDICATE £6.99
- CHAOS ENGINE £5.99
- PINBALL FANTASIES £6.99
- NICK FALDO'S GOLF £6.99

All above 4 games £17.99

* Add £3.20 P&P

ACCESSORIES

- 3.5" Disk head Cleaner £1.99
- Deluxe Mouse Mat £1.99
- 1000 Labels £6.99
- Amiga Disk Drives (Cumana/Amitek/Zappo) £54.99
- Manhattan Mouse Amiga/Atari £12.50
- Universal Printer Stand £4.99

ADD £2.00 FOR DELIVERY

TOP QUALITY RIBBONS

	Black Branded	Black Compatible	Colour
Panasonic KXP1124/1123/1180/1080	8.50	3.30	N/A
Panasonic 2123/2180/2135	8.15	4.00	15.45
Citizen 120D/Swift 9/24	N/A	2.70	13.60
Citizen Swift 90/200	N/A	2.70	13.60
Star LC10/20	N/A	2.95	10.99
Star LC200	N/A	3.50	12.30
Star LC 2410/24200	N/A	3.50	12.50
Epson LX400/LQ100	N/A	4.00	N/A

Add £2 for Delivery

ZAPPO SMART STOR HARD DISK

Provides games and data portability to A600/A1200.

260Mb .... £209.99 540Mb £309.99

AMITEK HAWK RAM BOARD

- 2Mb Ram .... £127 Alternative £120
- 4Mb Ram .... £187 Alternative £180

Call for GVP A1230-II 40MHz & 50MHz Accelerators

ZAPPO CD ROM FOR A1200 WITH 5 GAMES

Brutal Football - Alien Breed - F17 Challenge - Qwak - Project X

£199.99

AMIGA CABLES

- Amiga to TV Scart £10.99
- Amiga to Sony TV £10.99
- Amiga to Amiga £10.99
- Modulator overhang lead 23M/23F £11.99
- Joystick Splitters £5.99
- Automatic Mouse/Joystick cable £13.99
- Joystick Extension Lead 10ft £5.99
- Printer Lead £4.00
- Python 1M Joystick £8.75
- Maverick 1M Joystick £10.99

DUST COVERS

- Amiga 1200/500/500P/600 .... £4.00
- Commodore/Philips monitors £4.00
- Star/Citizen/Panasonic Printers £4.00

INKJET CARTRIDGES & REFILLS

- HP Deskjet Black Dual Capacity Cartridge £22.99
- HP Deskjet Black Dual Capacity Refill £15.99
- HP Deskjet 500C/560C Colour Cartridges £25.99
- HP Deskjet 500C/560C Colour Refill £16.99
- Canon BJ 10/200 Black ink Cartridges £16.99
- Canon BJ 10/200 Black ink Refill £9.99

Add £2 for Delivery

PRINTERS

NEW

PANASONIC 2135

24 PIN COLOUR

£159.99

All printers free lead & delivery

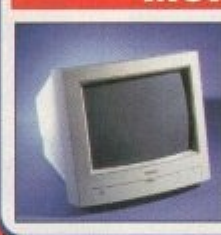


- **Panasonic 2135 24 pin Colour inc. sheet feeder £159.99**
- Panasonic 2023 24 pin mono **Free sheet feeder** £149.99
- Panasonic 1150 9 pin mono £119.99
- Panasonic KXP 4400 Laser Quality £375.99
- Canon BJ10SX ink jet £179.99
- Canon BJ200 ink jet £229.99
- Canon BJ400 colour £374.99
- Citizen ABC 24 pin colour £149.99
- Citizen Swift 200 24 pin colour £179.99
- Citizen Swift 240 24 pin colour £214.99
- Citizen Project II Inkjet colour £259.99
- Hewlett Packard 320 colour inkjet £249.99
- Hewlett Packard 320 inkjet £224.99
- Hewlett Packard 520 inkjet £249.99
- Hewlett Packard 560 colour inkjet (Limited stock) £409.99
- Star LC100 9 pin colour £124.99
- Star LC240 24 pin colour inc. sheet feed £169.99

Add £12.50 for (Word Processor or Ribbon) dust cover, printer stand, 500 A4 paper when purchased with printer

MONITORS

SPECIAL OFFER



Philips 8833/II

£215

As long as stocks last

- Microvitec 1438 (Free speakers) £294.99
- Philips 8833/II £215.00
- Sharp TV/Monitor £169.99

HOW TO FIND US



ALL PRICES INCLUDE VAT & DELIVERY (unless otherwise stated). Delivery within 3 days (UK MAINLAND ONLY). ADD £8.00 FOR NEXT DAY DELIVERY CALL OR SEND CHEQUES/POSTAL ORDERS TO:

GREY-TRONICS LTD, UNIT 1015 WHITGIFT CENTRE, CROYDON, SURREY CR0 1UU

SALES HELPLINE: 081-686 9973 Mail order prices only FAX: 081-686 9974

All offers subject to availability. E&OE. Prices/Pack details may change without notice. Please allow 6 working days for cheques to clear.

U.K. & INTERNATIONAL DELIVERY SERVICES – (BFPO ORDERS WELCOME + SURCHARGE)

LAND AIR SEA

Twist and

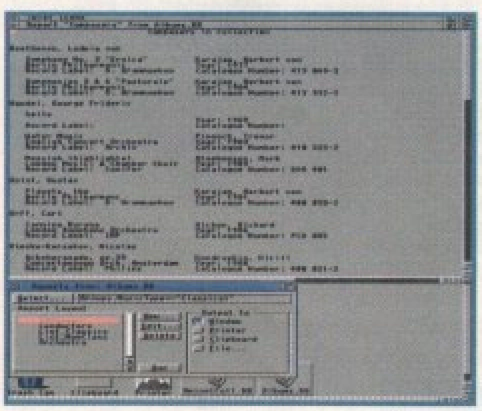
You know, I've tried a few database programs in my time, but very few of them ever seem to attain that fine line balance between ease of use and power. Mostly you have one end of the scale tipped to one side at the detriment of the other. Too easy to use and they often seem to lack any real power. Too powerful and they become overly cryptic with masses of commands and features hidden away within an ominously imposing and large manual, that has a page count that would make the encyclopaedia Brittanica blush.

Yes, there are very few which can claim to maintain their footing between these two extremes. Twist 2, from the ever prolific HiSoft, is one of them, however.

Versatility is one of Twist 2's strengths, allowing you to organise information easily and quickly and to manipulate it using some extremely powerful functions and features. Any project from a simple card-file-type address book or a complete, integrated sales system with relations between many other database files are easily achieved using Twist 2.

Creating and using a database generally consists of creating fields containing specific data which is collected into records and then organised into forms. The user can then access, search and generally process this organised data in many weird and wonderful ways using various functions and features built into the database.

A quick scan of the reference section of the Twist 2 manual is evidence enough to realise you have a comprehensive and powerful suite of functions and features at your fingertips. Thanks to the ARexx interface, those requiring even more power can turn their hand to this programming tool to create



Frequently-used report processes can be saved out to disk for quick and easy access



Using the report editor, you can design the way in which your data is formatted in a report file

even more features and functions. The basic building block of a database is its fields, which are specific data elements of a specific data type. Twist 2 has four main types of data which are text, numbers (integer or floating point) or a calendar date.

The mark of a quality database program is in what functions and processes can be applied to these fields. Twist 2's real power stems from its comprehensive array of functions which include statistical, boolean, geometric, text string and conditional functions – more than enough for most applications.

CALCULATIONS

You can assign a mathematical process to fields to automatically calculate figures. For example, say your database has a floating point field called Value which holds the price of a certain product excluding VAT. However, you want to be able to include VAT should the need arise. Therefore, you assign a field called VAT to be a floating point number which can either hold the number 0, for no VAT or 17.5 for the current rate.

You would thus edit the Value field to contain the expression (Total * (VAT / 100)) + Total, which will give the full price including any VAT if present. Although a somewhat simple example, the range of functions and possible expressions is almost unlimited.

Other field functions that can be applied include validation, which ensures the correct data is being entered. An example of this would be the VAT field. Obviously, the only values valid here are either 0 or 17.5.

To ensure the operator cannot enter any incorrect figures, this field could be validated using the expression VAT ==0 II VAT ==17.5. In English, this expression is essentially saying that the VAT field can only have the number 0 OR (expressed as the II characters) 17.5 in it, and anything else is just not on!

Thankfully, for those who are currently scratching their heads at the above expression, there is a complete reference section in the Twist 2 manual which describes all the various symbols and mathematical operators. If, after reading this, I can get the gist of it, anybody can.

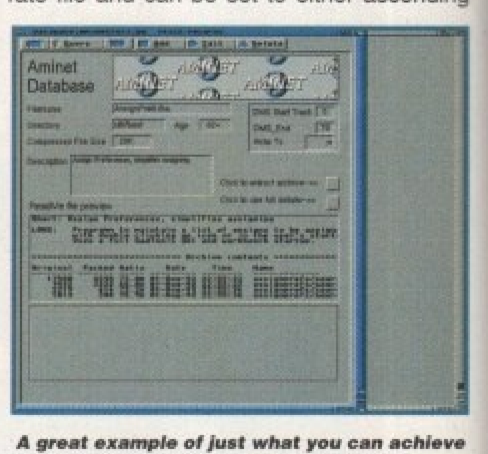
There are also five attributes which Twist 2 can assign to a field. These are Not editable (pretty self explanatory), Required – which means the field must have data entered into it, Fixed – meaning once data has been entered, no further calculation or validation will be performed – Zero – if empty, forces a field to a zero value if no data is present – and the last attribute, File, brings up a pop-up list which displays three settings, Fixed length, Compressed and Virtual. These are very useful when your database starts to attain mammoth proportions.

When you save your database, every field and record is saved to disk. The default setting is Fixed length, which means all parts of every record in the database, whether all characters are used or not, are saved to disk. If you have quite large text fields, the size of the database can rapidly become extreme, taking up copious amounts of valuable disk space.

This problem can be avoided by the use of the Compressed option. If a field is set to compressed it is not stored in the main database file but in a second file which contains all the other compressed fields that happen to be present within the database. The obvious drawback, of course, is that the information takes a little longer to retrieve because Twist 2 can't immediately find it in the database file.

The final setting is Virtual, and no, Twist 2 doesn't come with a VR headset. The Virtual setting stores nothing at all in the database file; instead the content of the field is computed every time the record is used from the calculation attached to the field.

Fields can also be Indexed, which means all values for a field are contained in a separate file and can be set to either ascending



A great example of just what you can achieve using Twist 2. This is a database for the Aminet CD-ROM, complete with built-in file extractor

Looking good

Presentation of your data is an important factor in how easy to read and informative your records look. Twist 2 allows you to easily create the look of your database via the Form editor. Using the mouse, simply click and drag the various form objects into position, sizing them to your requirements.

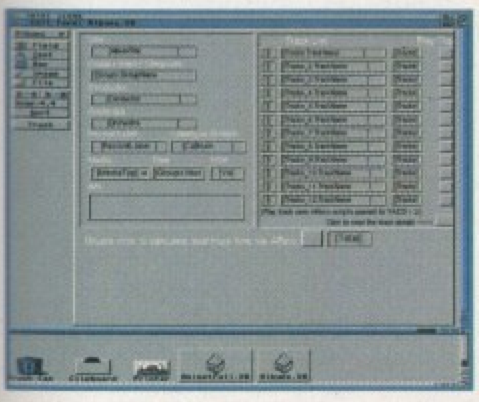
These form objects include database Fields, Text for adding informative descriptions on the form, Box, which allows you to provide a visual indication of grouped items, Image, to enable you to display icons on the form and, more interestingly, File objects.

File objects are quite a powerful feature within Twist 2 and allow you to use external files thanks to Workbench's Datatypes feature. Such external files can include IFF pictures, sound samples and any other filetype supported by the Datatype.

Some of these form objects can also have attributes such as colour, allowing you to create a visually informative and even aesthetically-pleasing database.

shout

Darren Evans gets in a whirl over Twist 2, one of the best relational database applications for the Amiga



This is where you design the layout of your records including the ability to have graphics, buttons and boxes to give it that professional look

or descending order. Once you have all your fields created, it's time to start entering your data. Twist 2 can display your fields in one of two ways, as a record form or list. A record form will display one record at a time whereas a list will display multiple records on one screen row, with the columns defining the fields.

Buttons at the top of the screen allow you to select whether you wish to Query (or search) the database as well as add, edit or delete records. Two arrow buttons allow you to browse through records one at a time, or you can use the arrow keys on your Amiga's keyboard.

GOOD RELATIONS

Twist 2 is a relational database which means you can build relations into your database forms. Simpler databases are generally termed 'flat-file', which means their forms simply consist of the fields within the one database file. Using Twist 2 you can create fields whose contents can be found in another database file. This provides for a more powerful and highly efficient database structure.

Relational databases are extremely useful in areas such as a sales system, where you may have various departments or people handling areas such as stock, orders and customers. They allow you to create relational fields within records and these fields get their information from separate database files.

It's quite possible to have all the information to hand in just one big database file, but this would obviously be overly complex to create, would make searching unnecessarily slow and would probably be very cumbersome to maintain. It would be much easier to have separate database files which could be integrated into each other, and this is exactly what relational databases allow.

A good example of this would be for a mail order firm who regularly send out promotional leaflets on their stock. Obviously, such a firm would have separate departments dealing with stock control and ordering, as well as customer details.

It is decided that a promotional leaflet is to be produced detailing a new range of software for the Amiga and this leaflet is to be sent off to their customers. The firm also deal in PC and Macintosh software so they will not want to target these customers for the promotional run. Using Twist 2's relational features, a separate database dedicated to producing the required information for the promotional run could be created.

REQUIREMENTS

This database would allow the user to search the stock database for machine-specific software and search the customer database for households with the required computers, thereby producing the required data for the promotional leaflet. Such versatility and efficiency would be difficult to achieve using a simple flat-file database.

Because of the demands on the Amiga this little powerhouse of a database provides, such as support for datatypes, it will only work on Amigas with Workbench 2 or above. Although you can probably coax Twist 2 to run on a 1Mb floppy-based system, you won't be able to do much with it. Hence, a hard disk and memory upgrade are highly recommended if you are to get the best from it.

Twist 2 is powerful, fast, easy to use and the most versatile database application available for your Amiga. If you are intent on injecting some kind of organisation into your life, look no further.

SYSTEM ESSENTIALS

RED = Essential **BLACK** = Recommended

2.0+ Workbench

3 Mb RAM

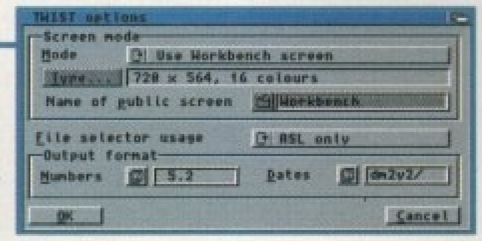
The bottom line

Product: Twist 2
Supplier: HiSoft
Price: £99.95
Phone: 01525 718181

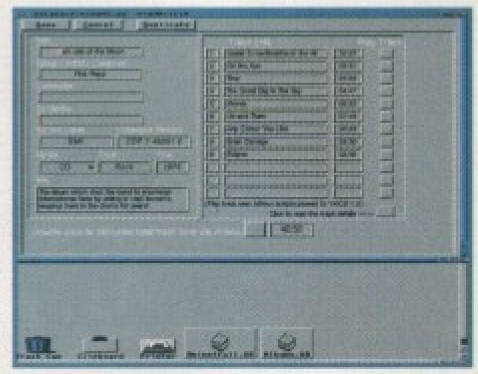
Ease of use	**10**
Implementation	**10**
Value for money	**9**
Overall	**10**



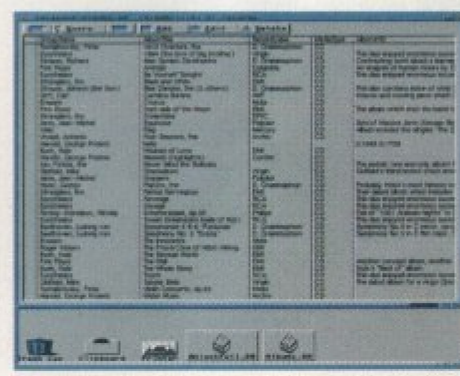
You can create your own database and report file icons for quick and easy access from the main screen



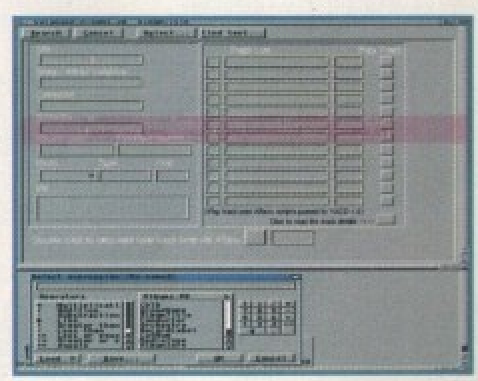
Twist 2 can be configured to use any available screen modes as well as custom or standard file requesters



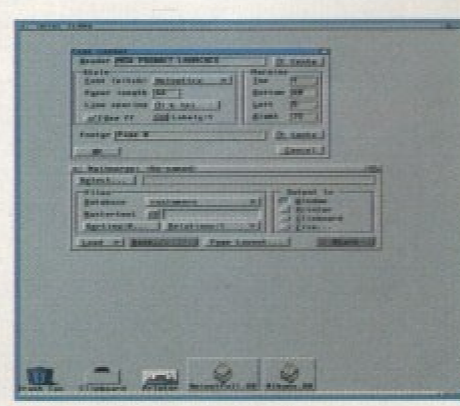
Once you have created your fields and designed the layout of your record forms, it's time to enter some useful data



Your database can be displayed in two ways. Either one record at a time or as an entire list of records



When it comes to querying your database (a fancy way of saying search), you can use simple text searches or powerful expressional searches



Hidden away in the masses of features which Twist 2 provides is a useful mailmerge feature

SOFTWARE 2000

We stock over 6500 QUALITY PD & SHAREWARE

ALL OUR PD DISKS ARE **99P**

NO MINIMUM ORDER

OVERSEAS POST & PACKAGE RATE
(Europe add 25p per disk for P&P)
(Worldwide add 50p per disk for P&P)

How to order

To order any disk just write the disk title and the disk code, EG U01 Against. Some titles have a number in (). This means the title come on (x) number of disks. To order PACK just write down the pack TITLE name.
ALL DISKS ARE COMPATIBLE WITH ALL AMIGAS UNLESS STATED
AGA Disk means for A1200/A4000 only

Price............99p per disk
Please add 70p to total for postage & package
Pack price as stated. All Orders Same Day Despatches
For the very latest disk catalogue please add 70p
MAKE CHEQUE/POSTAL ORDER PAYABLE TO: SOFTWARE 2000
SEND TO (ADDRESSES TOP RIGHT)

PLEASE SEND YOUR ORDER TO EITHER OF THESE DISTRIBUT…
YOUR ORDER WILL BE SAME DAY DESPATCH VIA FIRST CLASS P…

SOFTWARE 2000
Dept (ACD3)
48 NEMESIA
AMINGTON
TAMWORTH
B77 4EL
ENGLAND
TEL: 01827 68496

SOFTWARE 2000
Dept (ACD3)
9 WILLS STREET
LOZELLS
BIRMINGHAM
B19 1PP
TEL: 0374 678068

TEL OR FAX: 01827 68496

GAMES

EDUCATIONAL

EDUCATION PACK

OUR BEST SELLER. 5 DISKS OF THE VERY BEST IN EDUCATIONAL PROGRAMS & 21 GAMES PACKS SUITABLE FOR ANY AMIGA (A500-A4000) ONLY £4.9…

NEW TITLES

18 DEMOS

Age 18 and over only
X80 CINDY CRAWFORD (2)
X74 MADONNA (SEX) (3)
X01 SHOWER GIRL
X03 BODY TALK (2)
X09 MARIE WHITTAKER
X24 SABRINA SPECIAL
X25 DIE FILKINGER
X26 MADONNA EARLY DAYS
X28 KATHY LLOYD
X30 MEGA-MAID
X31 CALENDAR GIRL
X32 MAYFAIR
X33 UTOPIA (4 DISKS)
X35 GIRLS OF SPORT
X49 PAGE 3 GIRLS
X70 GON GON GIRL
X71 TINA SMALL
X91 Calendar girl 95

ANIMATIONS

VIDEO TITLERS/TOOLS

PRINTER MANAGER

STAR-TREK MANIA

IF YOU LIKE QUALITY STAR TREK RAY-TRACE ANIMATION THEN THIS PACK IS FOR YOU. 5 DISKS OF STUNNING STAR TREK ANIMATIONS. BETTER THAN HOLODECK SERIES. COMPLETE STAR TREK MANIA PACK ONLY £4.95. PLEASE STATE AMIGA WHEN ORDERING

U757 150 PRINTER DRIVER
LARGEST COLLECTION OF PRINTER DRIVERS

U.F.O. THE CLOSE ENCOUNTER

INCREDIBLE DISK SET PACK WITH REAL LIFE DOCUMENT REPORT. SIGHTINGS, U.F.O. KIDNAPPING ETC + MANY UNRELEASED REPORT OF CLOSE ENCOUNTER WITH THE U.F.O. BEING BRILLIANT. A MUST FOR ALL U.F.O. FANS. RECOMMENDED
compatible with all Amigas
6 DISK SET ONLY £5.95

A500 WORKBENCH 1.3 ... U330 WorkBench 2.04 emulator makes your computer run many new A500 plus/A600 software

A500+A600/A1200/A4000 use U329 Relockit V1.4 to make your computer run many of the old A500 software.
U329 RELOCKIT 1.4 OR U330 Workbench 2.04 only 99p

WORKBENCH EXTRA UTILITIES

Collection of the best WB utilities like ToolDeamon, Snoopdos V3, lost file finder, Memory monitor, Latest virus killer, Wb Disk copier etc. much too many to list.
All on 2 disks only £1.98 (not WB1.3). RECOMMENDED

GAMES CHEATS

Do you play your favourite game for ages, but can't get to the end of level or game?
Having problems with some games?
5 disk pack with 1000s of game cheats/help/level code action replay pokes etc. Should help you finish many games. Suitable for all Amigas – ONLY £4.95

AMOS

This is the largest collection of Amos hints, tips, graphic, procedures, routines, subroutines, graphics, utilities, sprite, scrollers routines, library & some of the top games & utilities source code. This pack will help you write more quality, compact & much faster programs.
10 DISK PACK....£10.90 compatible with all Amos & Amos Pro

TOP VARIOUS UTILITIES

WE ALSO STOCK THE ENTIRE COLLECTION OF LSD LEGAL TOOLS 1-150 SCOPE 1-220 FRED-FISH 1-1000 LSD DOCS 1-46 ASSASSIN GAMES 1-200 ETC

COMMODORE VIC 20 (plus) emulator + 30 top Vic 20 Game

It's here finally the COMMODORE baby VIC20, this pack comes with over 30 top Vic20 games like COSMIC CRUNCHER, RAT-RACE, SARGON II, CHESS etc.



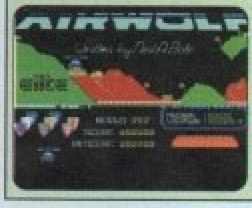
All games are on disk & run directly from disk. We have 2 versions available for the standard Amiga & special AGA for A1200-A4000. Please state Amiga when ordering.

Only £2.99

SUITABLE FOR ANY AMIGAS

COMMODORE 64 V3 & 45 TOP C64 GAMES

This is the very latest C64 emulator V3. This pack contains 45+ top C64 games like Airwolf, Rambo, Pacman, Jet Set Willy, Mutant Monty, Bruce Lee etc.



Much too many titles to list. Also included: C64 Utilities. All titles are on disk & ready to run on any Amiga.

RECOMMENDED

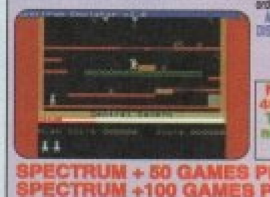
PRINTED QUICK LOADING INSTRUCTIONS SUPPLIED

Only £4.99

COMPATIBLE WITH ALL AMIGAS

ZX SPECTRUM 48K V2+

LATEST VERSION 2 PLUS. You can load & play all the original Spectrum games. Besides playing games you can write your own programs in Spectrum basic or machine code. All packs below include our latest Spectrum Emu & all packs below contain different games so it is OK to order more than 1 Spectrum games pack.



ALL OUR GAMES ARE SUPPLIED ON DISKS & RUN DIRECTLY, NO ADDICTION HARDWARE REQUIRED. COMPATIBLE WITH ALL AMIGAS WE HAVE 4 PACK AVAILABLE

MEGA SPECTRUM 400 GAMES PACK 4
Take all 3 packs + extra 50 new games FREE. Total 400 games for only £19.99

SPECTRUM + 50 GAMES PK1 ONLY £4.99
SPECTRUM +100 GAMES PK2 ONLY £7.99
SPECTRUM +200 GAMES PK3 ONLY £12.99
for ANY PACK SPECIAL AGA (A1200/A4000) VERSION INCLUDED WITH ABOVE PACK ADD 50P

SPECIAL OFFER

MEGA SPECTRUM V2+ 400 GAMES PACK 4

Pack 4 consists of the entire 50, 100, 200 Spacetech games + an extra 50 all new games. In this pack you will be able to pick all the top Spectrum games like 8 Kool, Daze 2, Jet Set Willy 1&2, Beach Head 2, Manic Miner 1&2, Jack the Ripper 1&2, Dan Dare, AirWolf, Elite, Jet Pack, Aliens, Star Blitz, Jet Pac, Speedking, Sp Chess, K-Kong and 300 more.

All packs are compatible with all Amigas

All 400 Spectrum games for only £19.99

BUSINESS SOFTWARE

U007 TEXT PLUS 2.2e easy to used word processor
U023 BANKING Home account program
U086 LABEL DESIGNER design your own labels
U087 CALV 1.2 Excellent Database prog. RECOMMENDED
U144 DESKTOP PUBLISHING The best PD DTP available
U128 BUSINESS CARD MAKER (not A1200) brilliant
U150 600 BUSINESS LETTER very handy. Get it now
U011 BUSSINESS CARD MAKER - can Print in color
U101 DATA BASE WORKSHOP (3) brilliant PACK
U121 SPREAD SHEET Very easy to used spreadsheet
U183 QUICK BASE Very powerful Database, Easy to use
U112 RIM DATABASE powerful database + full DOC
U195 AMIBASE - Professional II The best database yet
U227 TEXTRA Can edit serval document at once
U226 FLEXI BASE Small easy to operate database.
U256 PENNY WISE Very powerful Database.
U257 VISICALC Great database lots of fuctions
U266 TEXT-ENGINE V3.4 - full feature wordprocessor
U343 LITTLE OFFICE - database/wordprocessor/spreadsheet
U345 HOME BUSSINESS JOURNAL - Easy to use database
U357 BON APPETIT DATABASE many receipt.
U364 HOME ACCOUNT-Account program
U368 AMICASH regarded as the best account prog. Excellent
U369 JOURNAL full feature account program
U385 LORAN NOTE BOOK database & world map.
U395 DATA BASE compilation - best seller to date
U398 MORTAGE CALC calculate mortage repayment rate etc
U426 MONEY PROGRAM very good account program
U437 ACCOUNT MASTER V2.8 new account program
U520 HOUSE INVENTORY - ideal for home insurance
U539 ADDRESS PRINT V2.1 Store & print addresses
U567 TEXT-PLUS V 4.0 pro requires HD & 2meg
U661 TEXT ENGINES V4.1 latest 36,0000 word Spellchecker.
U688 INVENTORY 2 details of home contents, for insurance
U712 EDWORD PROFESSIONAL truly the best wordprocessor
U722 EASYCAL + massive spreadsheet max 92583 cells
U756 PAY ADVICE ANALAZER - money prog.
U802 ADDRESS PRINTING print addresses on labels
U809 PAY ADVICE V2 account program
U810 LABLE MAKER-Print labels etc. New
U800 THE MONEY PROGRAM - Accounts
U901 LOANS ACCOUNT
U904 ONFORM One of the best invoice makers
U959 ACCOUNT MASTER v2.2 (latest) programs up to 1000 entries per account

AGA A1200/A4000

NOTE This AGA listing is for the A1200/A4000 only.

AGA001 EXTENSION DEMO Stunning demo with fast landscape anim and a rotating city, still regarded as the best AGA demo
AGA002 FRACTAL GENERATOR stunning fractal in 256 colours
AGA003 WORKBENCH HACK many hack/toy/blanker ect
AGA006 NEW SUPER KILLER know & kill over 316 types of virus, must for all A1200 owner
AGA007 MINDWARP one of the very first demos for the A1200
AGA008 KLONDIKE DELUXE AGA (3D) Simply the best A1200card games with glamourous ladies as card faces 18 + only
AGA011 SLEEPLESS NIGHTS 3
AGA012 PLANET GROOVE Truly A1200 Demos
AGA013 MOTOR INVADER 2 (2D) Very playable INVADER clone set inside your computer. Loads of fun
AGA015 POINT OF SCALE Great A1200 only demos
AGA016 CHROMAS- Fairly good demo.
AGA017 WORLD OF MANGA AGA (4DISK) magnificent Japanese comic slide show includes Japanes Chick etc recommended. Still the best seller on the A1200—brilliant
AGA021 MAGIC WORKBENCH Improve the look of your WB& add some function to your WB really BRILLIANT
AGA022 WB 3 UTILITIES loads of WB 3 only utilities like degrader etc. Not for beginner
AGA023 U-CHESS the best chess program games so far but requires 4 megbytes. Brilliant graphics
AGA024 WORKBENCH 3 SCREEN Great backdrop for A1200 (not beginner) GIF BEAUTIES is one of the highest quality gif Pictures available (1-18)
AGA41 GIF BEAUTIES (1-18) pictures of raunchy women who don't seem tobe wearing many clothes
AGA62 BODYSHOP 1 More of above
AGA64 BODYSHOP 2 (2D) More of above
AGA66 BODYSHOP 3 More of above
AGA68 BODYSHOP 4 (2D) More of above
AGA70 BODYSHOP 5 (2D) More of above
AGA72 BODYSHOP 6 (2D) More of above
AGA74 BODYSHOP 7 (2D) More of above
AGA80 FITCHICK 1 See BODY SHOP for description
AGA82 FITCHICK 2 (2D) See AGA41 for description
AGA84 FITCHICK 3 (2D) See AGA41 for description
AGA090 ASSASIN A1200 FIX DISK 1-Brilliant collection of degrader that should get most of the old A500 games/software to run on the A1200. A must for anyA500 owner just upgrade to an A1200 - RECOMMENDED
AGA091 ASSASSIN A1200 FIX DISK 2 (new) like above but with new collection (different) degrader - recommended you buy both disks - super
AGA094 RELOCKIT V1.4 latest. Run A500 SOFTWARE
AGA097 A1200 UTIL - AGA TESTER, SYSINFO etc
AGA098 ACTION REPLAY V4 Complete ACTION REPLAY on disk.
AGA099 MADFIGHTER 2 brilliant street fighter clone
AGA100 AGA BLITZ SCREEN BLANKER
AGA101 FAST GIFF 2 display GIFF pics in Workbench.
AGA102 AGA DIAGNOSTIC - NEW system tester
AGA103 BLACK BOARD AGA decent image processor
AGA104 REND 24 Similar to above
AGA105 QUICK GRAB AGA - can grab AGA screens
AGA110 WORLD BEYONDS 1 (3) stunning 256 COLOUR fantasy art. Leaves Atari users breathless
AGA114 SMELL LIKE CHANEL NO5 Brilliant demo raytrace pictures ever released on the A1200
AGA121 MAGIC FACTORY 1 STAR TREK (5 disks)
AGA133 AGA UTIL v1 AGA util compilation
AGA134 AGA UTIL v2 more AGA util compilation
AGA135 AGA UTIL V3 more of above
AGA136 AGA UTIL V4 even more of above
AGA137 IMAGE PROCESSOR IFF picture processor.
AGA138 MULTIBOOT- 4 various versions A500 EMU
AGA139 WB3 HARD DISK PREF & INSTALLER installing WB 3 /pref/etc on the hard disk
AGA140 CROSS DOS PLUS v5.1 read/write PC files
AGA141 FARRARI ART 2 (2D)- load of Ferrari & ray trace
AGA142 SUPER LEAGUE 3 - latest manager games
AGA144 SPEAK & SPELL - educational software for kids
AGA145 BIG TOPS (18 + only) Hmmm
AGA146 KELOG LAND - brilliant platform games - get - a must
AGA150 ACTION REPLAY V5 - NEW UPDATE TO V4
AGA160 GIGER TRIZ very playable 256 colour tetris
AGA162 FATAL-BLOW new STREET-FIGHTER 2 clone
AGA164 CINDY CRAWFORD Vol 1 (2 disk) latest release
AGA166 INFESTATION (3 disk) The ultimated AGA demo
AGA170 CINDY CRAWFORD Vol II (2 disks) amazing
AGA172 VIDEO TRACKER AGA - ultimate demo maker
AGA174 MAGIC WB EXTRA vol 1 & 2 (2 disks)
AGA180 GIF BEAUTIES Vol (11-18) 8 more girl disks
AGA189 FRIDAY AT 8 other brilliant AGA demos
AGA190 ASSASIN MULTIVISION AGA pic viewing util
AGA192 ALIEN FRENZE 2 player blasting - power up
AGA194 BIG TIME SENSUAL (2 disk) SPACE BALL 2
AGA200 MASQUERADE 2 disk brilliant puzzle games.
AGA202 RAM JAM 94 it can be done (2 disk)
AGA203 EXPLIXIT 2 DEMO new effect well done.
AGA204 COMPLEX ORIGIN 2 disk requires 2 disk drives
AGA206 TREASURE OF TUTANKHAMUN-education tool
AGA210 CHANEL Z DISK MAG (2D) A1200 disk magazines
AGA220 KLONDIKE NEW CARD SET (7disks)
AGA230 LOVE 2 disk - simply brilliant
AGA231 AGA UTIL 7 & 8 (2 disks) more util
AGA234 KNOTTY Stunning AGA sliding picture puzzles
AGA240 LOTTERY WINNER hopefully will improve your chances of winning a jackpot. GOOD LUCK
AGA241-258 AGA GAME-GALORE AGA 01-18 We stock the entire collection of the AGA GAME GALORE each disk pack with quality AGA compatible games. RECOMMENDED
AGA251 PACKMAN AGA - the best pacman yet
AGA252 ROCKET PD - Super thrust clone brilliant graphics for 1 or 2 player
AGA253 REAL DEMO stunning special effects
AGA254 DIRT AGA Brilliant 256 colour effects
AGA255 DELIGHT EXPLORE excellent demos
AGA256 KEFEREN AGA Demo lots of effect
AGA257 MINOMIST RAVE great rave music.
AGA258 OXYGENE Fantastic demos
AGA259 INTELOUT another very good demo
AGA260 SOME JUSTIC 94 Demo of the month, brilliant whirl effect. RECOMMEND
AGA262 TO THE DEATH very good STREET FIGHTER clone with very good graphic.
AGA263 GEORGE GALAXO (2 disks) brilliant multi-level shoot/platform game. RECOMMENDED
AGA265 MISSILE OVER ZENON (2 disks) Brilliant 3D missile commander with fantastic graphics
AGA266 TEAM HOI DINO PLATFORM excellent dino platform. Note: this disk was a commercial game
AGA268 TEAM HOI SAGA. The Final chapter (3 disks). The ultimate in demo, comes on 3 disks
AGA269 RAYWORLD (3 disks) very impressive
AGA270 CREAM DEMO - lot of 256 Vector effects
AGA273 EMPTY HEAD lots of vector/ ray trace
AGA274 MUSIC 2 SURVIVE 2 disks 8 excellent music master pieces. Well worth getting
AGA271 RAVE MAXIMUM OVERDRIVE II (2 disks)
AGA278 CHANNEL Z ISSUE 1 (AGA) (2 disks) AGA base disk magazines. RECOMMENDED
AGA279 AGA Utilities including Cache X, Superduper V3, New Menu 2 etc. RECOMMENDED
AGA280 CHANNEL Z issue 3 (2 disks) AGA disk magazine - get the most out of Dpaint
AGA282 CHANNEL Z issue 5 (2 disks) AGA disk magazine topic. Demo/music
AGA285 WORKBENCH BACKDROP VOL (5) Stunning AGA backdrop for WB
AGA286 SPECTRUM EMULATOR V1.3 AGA Latest Spectrum emulator for AGA only

DISK DRIVE HEAD CLEANING KIT

ONLY £2.99

OR FREE SEE →

YOUR COMPUTER DISK DRIVE HEAD IS VERY MUCH LIKE THE VIDEO HEAD. IF THE DISK DRIVE HEAD GETS TOO DIRTY THEN YOU WILL EXPERIENCE READ WRITE ERROR OR SOME OF YOUR SOFTWARE MIGHT NOT LOAD. REMEMBER IF YOUR AMIGA IS MORE THAN 6 MONTHS OLD IT'S BEST TO HAVE IT CLEANED ONCE A MONTH. OUR KIT CAN CLEAN YOUR DRIVE IN LESS THAN 30 SECONDS & USED UP TO 20 TIMES.

FREE DISK DRIVE HEAD CLEANING KIT WORTH £2.99 WHEN TOTAL ORDER MORE THAN £21

FREE

Please choose your FREE GIFT by ticking offer of your choice & return the token with order

BUY ANY 10 OR MORE DISKS & CHOOSE 1 EXTRA DISK TOTALLY FREE

SOFTWARE 2000

Please Tick your Free Gift, Cut & Return with order
Expires 20th May, 1995

☐ FREE DISK OFFER
☐ FREE CLEANING KIT

ALL NEW AGA GAMES PACK

for A1200/A4000 only this pack contains five of the very latest release. Recommend or order separate use order code

AGA295 DE-LUXE MONOPOLY
AGA296 DONKEY KONG
AGA297 PAC MAN CD32
AGA298 ROCKETPD 2
AGA299 SCRABBLE

FIVE OF THE VERY LATEST ONLY £4.95

SOFTWARE 2000 FEB/MAR TOP 20 SELLER

01 X091 CINDY CRAWFORD CALENDAR '95
02 U981 VIRUS CHECKER V6.50
03 U746 3D GARDEN DESIGNER
04 U330 WB 2.04 EMULATOR
05 U757 150 + PRINTER DRIVER
06 E150 GUIDE TO INTERNET
07 U329 RELOCKIT V1.4
08 C64 EMULATOR V3 & GAMES PACK
09 U983 MAGIC WB & MAGIC MENU
10 SPECTRUM V2 & 200 GAMES PACK
11 LITTLE OFFICE V2
12 U742 HOW TO MAKE AUTO BOOT DISK
13 U622 ACTION REPLAY V4 (AGA)
14 U887 DISK REPAIR KIT 4
15 U980 LOTTERY WINNER
16 U731 A-Z CHEAT
17 U781 ACCOUNT MASTER V3
18 U650 COPY & CRACK TOOL 2
19 VIC20 & GAMES PACK
20 AGA306 ASSASSIN FIX DISK 3

100 TOP DEMOS

The Largest collection of demos ever released – this pack contains over 100 top demos. Must for all Demos. Out top seller...RECOMMENDED

ONLY £7.95 suitable for all AMIGAS

SPECIAL PACKS

ONLY £4.99 PER PACK

ALL PACKS SUITABLE FOR ANY AMIGA SYSTEM

Board Games Pack 1 (5 disks)
Brilliant collection of the best board games, eg: Scrabble (new), Monopoly, Chess, Dice, Dominoes, Cluedo etc. Far to many to list

Arcade Games Pack 2 (5 disks)
Collection of the very best classic arcade games, eg: Centipede, Space Invader, Pacman, etc. & many more. RECOMMENDED

Card Games Pack 3 (5 disks)
Carefully pick the finest card games like Poker, Spade, Bridge, Blackjack, Pontoon, Solitaire, Klondike, etc. & many more

Puzzle Games Pack 4 (5 disks)
5 disk Pack with quality puzzle games like Simon, Rubik Cube, PuzzWord, Picture Puzzle & many more. Far to many to list

Mini Workbench Games (5 disks)
One of the most interesting packs. 5 disks crammed full of unique tiny but perfect replica games. A bit like playing on the Game Boy. It can be extremely funny to play a tiny game like Pacman, Tetris etc. Recommended

LITTLE OFFICE 2

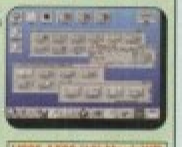
New Release includes
550 Business Letters
Word Processor
Calendar
Name & Address Database
All this for only £1.99
COMPATIBLE WITH ALL AMIGAS

HARD DRIVE & DISK DRIVE Space Doubler

Epu V1.6 this doubles the size of your HD or Disc Drive storage capacity. Recommended.
U971 EPU V1.6 ONLY 99p
SUITABLE FOR WB2/3

MAGIC WB EXTRA

Hundreds of brilliant Magic WB Icon/Backdrop 8 or 16 colour. Must for all Magic Wb users. Only £1.98 per volume of 2 disks



MAGIC WB.01 EXTRA VOLUME 1 (2 DISKS)
MAGIC WB.02 EXTRA VOLUME 2 (2 DISKS)
MAGIC WB.03 EXTRA VOLUME 3 (2 DISKS)
MAGIC WB.04 EXTRA VOLUME 4 (2 DISKS)
MAGIC WB.05 EXTRA VOLUME 5 (2 DISKS)
MAGIC WB.06 EXTRA VOLUME 6 (2 DISKS)

Quality backdrop or seamless Workbench pattern for using with Magic WB. Can be without MagicWB on (WB2 use Nickprefs) (WB3 WB pattern)

MAGIC WB.28 BACKDROP & PATTERN V1 (4)
MAGIC WB.29 BACKDROP & PATTERN V2 (2)
MAGIC WB.30 SEXY BACKDROP
MAGIC WB.31 150+ NEW POINTER
MAGIC WB.33 MANGA ICON & BACKDROP & OTHER (2)

U995 A500 (13) MagicWB Emulator (almost)
This will give your A500 an 8 colour Workbench. Also comes with a wide range of backdrops (picture behind the Workbench) & 8 Colour Icons

Want to win the National Lottery?

LOTTERY WINNER

this programme should give you a better chance of winning the lottery.

AGA240 LOTTERY WINNER (for A1200 & A4000 only)

NEW

U980 LOTTERY WINNER like above & for all Amigas



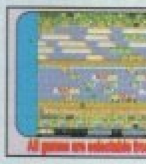
MANGA AKIRA

Brilliant pack of 6 disks containing some of the best MANGA AKIRA Games, Animations, Slideshows, Demos. All based on the Japanese MANGA.
6 disks only £5.95. Run on all AMIGAS



Giff Beauties vol 1-18

Pictures worth a thousand. Amazing full 256 colour (AGA). Only 99p per disk. Phone for the latest discount price on the entire volume (1-18)



101 GAMES 2

PRICE ONLY £12.99

This is the very latest all new 101 games complation pack 2 containing some of the very best in PD games like Zeus, Wonderland, Dragonflies etc. Much too many to list.

COMPATIBLE WITH ALL AMIGAS

All games are selectable from an easy to use menu & most games come with full playing instructions

101 GAMES

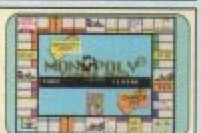
PRICE ONLY £10.99

Brilliant collection of over 100 of the very best of PD games includes INVADER 2, Tetris, Monopoly etc. Much too many to list. Very easy to use menu system. Most games come with full playing instructions.

MUST FOR ANY GAMER PLAYER

COMPATIBLE WITH ALL AMIGAS

All games are selectable from an easy to use menu & most games come with full playing instructions



RAY TRACING

IMAGINE

01 IMAGINE - F1 Formula 1 & 2 (2 Disks)
03 IMAGINE - 2000 Leagues & Stream
04 IMAGINE - Animal Plant (2 Disks)
05 IMAGINE - Computer+Accessory
06 IMAGINE - Fighter Plane
07 IMAGINE - Human Body Object
08 IMAGINE - Jet 2 - Helicopter etc. (2 Disks)
11 IMAGINE - Manga 2 (2 Disks)
13 IMAGINE - Musical Instrument
14 IMAGINE - Robots (3 Disks)
17 IMAGINE - Sea Quest
18 IMAGINE - Space Ship (4 Disks)
21 IMAGINE - Star War
22 IMAGINE - Stingrey & Sea Obj
23 IMAGINE - Street Fighter
24 IMAGINE - Train (2 Disks)
27 IMAGINE - True Fonts (5 Disks)
30 IMAGINE - Various Object Vol 1 (5 Disks)
35 IMAGINE - Various Object Vol 2 (5 Disks)
40 IMAGINE - Various Object Vol 3 (5 Disks)

50 IMAGINE UTILITIES - (3 disks) Lots of various utils for convert, distort, create morph etc. Imagine Object. Not for beginners.

53 IMAGINE TEXTURE & ATTRIBUTE (4 Disks)

55 IMAGINE 2 BUDDY SYSTEM (2 Disks) Brilliant instant on line help/tutorial on every Imagine command. RECOMMENDED.

150 VARIOUS IMAGINE OBJECTS
150 all sorts of objects ranging form disk box to a Starship Enterprise. Only £7.99

REAL 3D V2 Object

200 R3D Various Objects Vol. 1 (5 Disks)
205 R3D Various Objects Vol. 2 (5 Disks)
210 R3D True FONTS Vol. 1 (5 Disks)

LIGHT WAVE Object

220 LW Various Object Vol. 1 (5 Disks)
225 LW Various Object Vol. 2 (5 Disks)
230 LW True FONTS Vol. 1 (5 Disks)

SCULPT Object

240 SC Various Object Vol. 1 (5 Disks)
245 SC Various Object Vol. 2 (5 Disks)
250 SC True FONTS Vol. 1 (5 Disks)

CALIGARI Object

240 CA Various Object Vol. 1 (5 Disks)
245 CA Various Object Vol. 2 (5 Disks)
250 CA True FONTS Vol. 1 (5 Disks)

Other packs also available for XXF, REFLECTION V1.6 & V2, MAXON Cinema etc.



SAMPLES

All samples below are in standard IFF format which will load into EG Protracker, Octamed etc.

ST-01 RIPPED MODULES Vol 1-18a Rip music from various top demos
ST-03 TECHNO MODULES Vol 1-4 Brilliant Technomusic
ST-04 INSTRUMENTS Vol 1-14 Up to 100+ various instruments per disk
ST-11 ABERCROMBIES INSTRUMENTS
ST-12 DRUM SAMPLES-SOUNDS (2 disks)
ST-14 HOUSE MUSIC INSTRUMENTS
ST-15 PSYGNOSIS INSTRUMENTS
ST-17 BACKING INSTRUMENTS (4 disks)
ST-21 HOUSE MUSIC INSTRUMENTS 2
ST-25 SOUND FX INSTRUMENTS (3 disks)
ST-26 KRANGS INSTRUMENTS (3 disks)
ST-29 CLAYS INSTRUMENTS VOL 1-10
ST-39 VOCAL INSTRUMENTS Vol 1-4
ST-44 PIANO INSTRUMENTS
ST-45 WINDSTRING INSTRUMENTS
ST-47 PERCUSSION INSTRUMENTS (2)
ST-48 RAGISH HOUSE SAMPLES (4 disks)
ST-55 TERMINATOR SAMPLES (4 disks)
ST-58 RUNNING MAN SAMPLES (2 disks)
ST-61 PREDATOR SAMPLES (3 disks)
ST-64 TECHNOTRONIC SAMPLES
ST-65 FX INSTRUMENTS Vol 1-5
ST-69 STAR TREK SAMPLES
ST-70 SHAMEN SAMPLES
ST-71 ALF SAMPLES
ST-72 BOMB THE BASS SAMPLES
ST-73 C&C MUSIC SAMPLES
ST-74 RAGISH SAMPLES (2 disks)
ST-75 ELECTRONIC SAMPLES
ST-76 RAVE SAMPLES VOLUME 2
ST-78 SILLY SAMPLES
ST-80 HORROR SAMPLES (2 disks)
ST-86 HYBRID INSTRUMENTS
ST-87 C/ SOFTWARE RAVE SAMPLES 2
S151 MEGA-MODULES (1-4) 4 disks full of auto play music/songs. Brilliant
S171 HOUSE SAMPLES (3 disks)
S175 KORGE SAMPLES (3 disks)
S300 SPECIAL FX VOL 1 (1-10 disks)
S310 SPECIAL FX VOL 2 (1-10 disks)

CLIP ART

Very high quality clipart suitable for any PAINT or Desktop Publishing package

C01 Accents
C02 Aircraft
C04 Alphabet1
C06 Animals1 (3)
C07 Babies & Children
C09 Bears (2 disks)
C10 Borders
C11 Building
C12 Business
C13 Cats & Dogs
C14 Comics
C17 Halloween
C18 Logos
C19 Maps
C23 Space
C24 Sports
C25 Teddies
C26 Transport & Travel
C27 Weddings
C29 Women & Men (2)
C30 Xmas
C31 Disney clip art
C32 Comic clip art



Various subjects of clip art of the highest quality. Results in super print out. RECOMMENDED for any DTP or Paint package

CP01 CLIP-ART VOL 1 (5 disks)
CP02 CLIP-ART VOL 2 (5 disks)
CP03 CLIP-ART VOL 3 (5 disks)
CP04 CLIP-ART VOL 4 (5 disks)
CP05 CLIP-ART VOL 5 (5 disks)

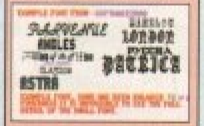
FONTS

QUALITY IFF FONTS SUITABLE FOR ANY PAINT PACKAGE E.G. DELUXE PAINT, WORD PROCESSOR & D.T.P. (BIT-MAP FONTS)

NOTE: ALL FONTS IN THIS COLLECTION ARE VERY HIGH QUALITY & NO TWO FONTS ARE SAME - GUARANTEED

F-1-24 PRO FONT Volume (disk) 1-24

to order: F(disk number) Pro Font



HARD-DISK USER SPECIAL OFFER

EACH OF THE PRO-FONTS TAKES ABOUT 700-800K

Take the entire Pro Font Vol 1-24 in compress format for only

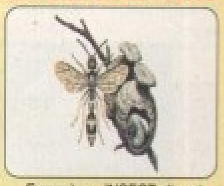
£11.99

With our installer (included) you can install any volume of fonts onto hard disk with just a few mouse clicks. On line help available (very easy to install on hard disk)

NEW PROFESSIONAL COLOUR CLIP-ART

Birds (8)	Cars (1)
Cats (1)	Dinosaurs (2)
Dogs (10)	Fishes (7)
Flowers (10)	Fruits (3)
Horses (2)	Insects (5)
Instruments (3)	Mammals (12)
World Maps (15)	Planes (2)
Reptiles (4)	Ships (2)
Trees (10)	Vegetables (4)

numbers represent number of disks available



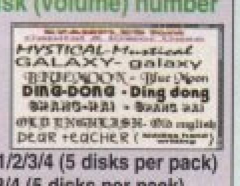
Example ... INSECT clip art

DESKTOP PUBLISHING FONTS & CLIPART

These Fonts are compatible with PageStream 1.8 & above, Pro-Page V2.1 & above, Pagesetter V3, TypeSmith, Final Copy, Final Writer, Worthwords V2 & above, Workbench V2 & above. Other DTP or WORD PROCESSOR please refer to manual & check if your DTP or WORD PROCESSOR can use the fonts listed below.

To order write font type & disk (volume) number

Computa Graphic (CG) vol 1-60
Adobe font Volume (disk) 1-59
Also available special fonts for
ProPage V2 disk 1-18
Page Setter V2 disk 1-18

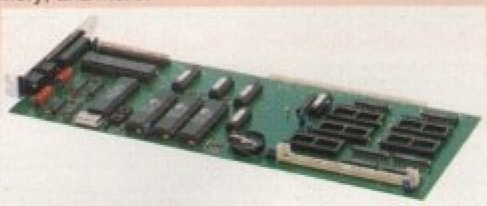


also available E.P.S. clip art Pack 1/2/3/4 (5 disks per pack)
PAGE-STREAM CLIP ART 1/2/3/4 (5 disks per pack)

EMPLANT

E586DXSM Emulation Module

The new E586DX emulation module offers a high speed 586DX (FPU, MMU, and new instruction set) emulation with complete low-level architecture support, giving you the ability to run DOS, OS/2, NT, Windows 3.x, and even Chicago! There is support for MDA, CGA, EGA, VGA, SVGA video modes (dependant on hardware, AGA or a supported graphics card is required for VGA/SVGA), sound, joysticks, floppy drives, hard drives, extended memory, and more!



Macintosh® Emulation Module

The Macintosh emulation module is a 'generic' Macintosh with the speed of the emulation depending on the processor your Amiga is using. An A3000 is equivalent to a MAC IIci. An A4000 is equivalent to a Quadra 900. Support for up to 16 colours is provided for non-AGA machines. A4000 owners can use a full 256 colours! Up to 24 bit (16 million+) colours is supported using third party video boards. Built in multiple file transfer allows for quick and easy transfers between the Amiga and MAC emulation. Support for AmigaDOS devices, Scanners, CD ROM, MIDI, SyQuest removable drives, Printers, Modems etc. Full stereo sound is supported too! Requires Macintosh ROMs (not supplied).

The possibilities with a multi-platform machine are endless. Now you can take advantage of a whole host of great software previously unavailable, and use them to compliment each other. By upgrading your Amiga (extra memory, faster processor, etc) you instantly upgrade your emulation too! All major graphics cards are supported for improved video performance such as: CyberGraphics, Picasso II, EGS-Spectrum, Vivid-24, Rainbow II, Rainbow III, Visiona Paint, Merlin, Retina, Retina Z3, Piccolo, PiccoloSD64, EGS110/24, and OpalVision!

Blittersoft are the exclusive European distributors for Utilities Unlimited. We provide a full technical support service, as well as software upgrades to all official UK boards. Check before you buy.

EMPLANT BASIC	£249.95
EMPLANT OPTION A (AppleTalk ports)	£299.95
EMPLANT OPTION B (SCSI)	£299.95
EMPLANT DELUXE	£349.95
E586DXSM MODULE	£119.95

PICASSO II

PICASSO II is the leading graphics card on the Amiga. It offers unrivalled support and retargetable graphics on any Zorro based Amiga. Workbench emulation offers 256 colours, even on non-AGA machines (Requires OS3.1) at resolutions up to 1600x1280. Supports HiColour (16 bit) and True Colour (24 bit) graphics - 16 million colours!



There is no longer a Chip RAM limitation and screen configuration is provided through PicassoMode, which allows the creation of custom screens quickly and simply.

PABLO is the new Video Encoder option for *Picasso II*, expanding it with two additional video ports, one standard Composite Sync Signal, and one S-VHS (Y-C) compatible port. All PAL compatible video devices can be plugged into Pablo, such as a colour TV or a video recorder. Pablo has 15KHz overload protection and is supplied with cables/adapters, Animation examples and a 24 bit animation player.

PICASSO II 2MB	£299.95
PABLO VIDEO ENCODER	£129.95

OS 3.1



Many of the latest software requires the latest operating system. Now you can upgrade to KickStart 3.1 for virtually any Amiga. Non-AGA machines can deliver a 256 colour Workbench with OS3.1 and Picasso II.

OS3.1 FOR AMIGA 500 OR 2000	£84.95
OS3.1 FOR AMIGA 1200, 3000 OR 4000	£94.95

Please specify machine. Also note that revision 3-5 motherboards require linking to be added. We strongly recommend that a professional computer repair/service company undertake fitting. We cannot exchange any damaged or incorrectly fitted components.

ARIADNE

Ever wanted to set up a network but been afraid of the complexity involved? Now there is a simple but effective solution for any Zorro based Amiga. In addition, Ariadne has two extra parallel ports and includes Commodores industry standard software solution ENVOY.
Ariadne offers 10Base-2 (Thin ethernet, coax cable) and 10Base-T (Twisted pair, western jacket), Socket for a boot ROM, SANA-II compatible driver for ethernet and parallel port, 32Kb cache to support the CPU and full manuals.

You can hook up additional Amiga`s to the parallel ports with Liana.

ARIADNE	£199.95

LIANA

Liana is the ideal solution for a quick, easy yet efficient connection between two Amiga`s. Simply plug the special cable into the parallel port, install the software and you are ready to go. Now you can share hard drives etc. without on a small budget. The software supplied is ENVOY.

LIANA	£59.95

PICCOLO SD64

The Piccolo SD64 graphics board is a state of the art Zorro II/III (auto-sensing) graphics card with a built in Amiga video pass-through and expansion port for forthcoming modules (such as video encoder).
Using the latest 64 bit Alpine graphics processor, 64 bit blitter and fast Zorro III interface, incredible 24-bit speeds are achieved.
Piccolo SD64 comes with the latest EGS system and 24-bit paint package as well as loaders/savers for many common packages and a slideshow program. A full Workbench emulation is also part of the package.
The board is available as a 2Mb or 4Mb system, with no chip RAM limitations.
The maximum pixel clock is 110 MHz and user definable resolutions to 1600x1280 are achievable.
The 2Mb board can display a maximum of 800x600 in full 24 bit colour, whilst the 2Mb board can display 1024x768 (interlace).

PICCOLO SD64 2Mb	£299.95
PICCOLO SD64 4Mb	£349.95

WE HAVE MOVED.
We can now arrange demonstration of any product at our new premises. All demonstrations by appointment only so *please call first.*

CYBERSTORM

CyberStorm is a fully modular system offering huge increases in power and expansion capabilities. This design allows processor upgrades from the base 40MHz 040 system to the world beating 50MHz 060! With additional upgrades such as the SCSI-II and the I/O module, CyberStorm offers unequalled possibilities.
The CyberStorm carrier board inserts into the 200 pin Amiga fast slot, and has ports for the CPU, Memory and I/O modules. The CPU module is prepared for clock speeds to 80MHz, with active cooling and an extra expansion port for future modules (ie DSP board). The CyberStorm memory board can carry 4 SIMMs using standard 72 pin modules, single or double sided and either 4,8,16,or 32Mb (Max 128Mb). Data transmission of >50Mb/sec is achieved. The CyberStorm I/O module consists of a Fast SCSI-II interface with up to 7Mb/s Asynchronous, 10Mb/s Synchronous transfers and Active bus terminations, 10Mbit/s Ethernet controller (10BaseT) with SANA driver and BNC/DSub 15 connectors and high speed 2MBaud RS232 Serial interface. The CyberStorm SCSI module has the same specification as the SCSI interface on the I/O module.

CyberStorm 040 40 MHz No proc.	£449.95
CyberStorm 040 40 MHz	£729.95
CyberStorm 060 50 MHz	£899.95
CyberStorm Z3 SCSI module	£149.95
CyberStorm I/O module	£349.95
CyberStorm upgrade 040 to 060	£399.95
CyberVision 2Mb	£299.95
CyberVision 4Mb	£369.95

The CyberVision64 graphics card comprises of a 64 bit graphics processor and Blitter with 32 bit Zorro III bus interface. It is available in 2Mb or 4Mb versions (using common memory modules), offering up to 1600x1200 interlaced, 1280x1024 non-interlaced and 135MHz video bandwidth. Planar-to-Chunky pixel conversion is performed by on board hardware, some 6-8 faster than typical software solutions and accelerating Workbench emulation. Support for draggable and virtual screens, expandable bus for future cards (video, JPEG, MPEG..) and Amiga video pass-through.

*The CyberStorm 060 and CyberVision64 should be available by the end of March. We have back-ordered - Reserve your unit **NOW!***

CYBERVISION 64

PhotoWorX & FolioWorX

PhotoWorX software to read PhotoCd format, save, image process etc.	£49.95
FolioWorX player for PhotoCD and PortFolio CD`s, both Amiga and CD32 versions (specify)	£39.95

Blittersoft
6 Drakes Mews, Crownhill,
Milton Keynes. MK8 OER

01908 261466	Orders Only
01908 261477	Technical & Queries
01908 261488	Fax
01908 261499	BBS (24 Hour)

Order by Access/Visa/Delta/Switch
or Postal order/Cheque

Prices and specifications may change without notice. All prices include VAT. All trade marks acknowledged. It is advisable to telephone to confirm pricing/availability on any product.
TRADE ENQUIRIES WELCOME. E&OE
also plesurf@cix.compulink.co.uk

The world on a disc

Adam Phillips reviews Aminet Set 1, the CD collection so utterly packed with goodies you may never need another CD-ROM again

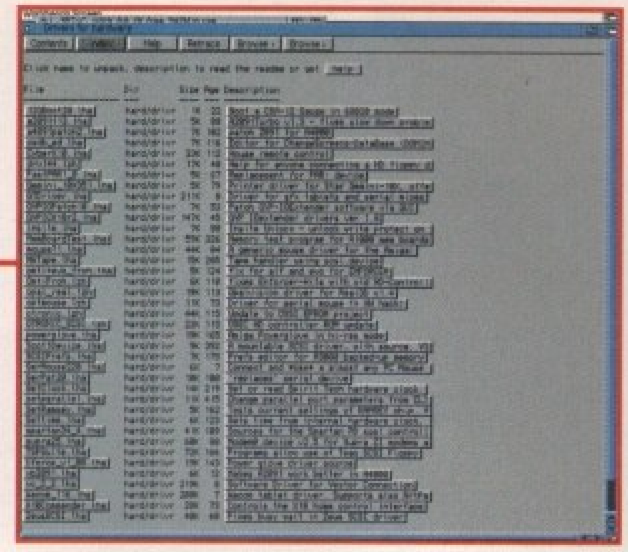
Aminet is the Amiga-specific side to the Internet. Some bright spark out there decided that all the best shareware programs, graphics, sounds, samples and the other mass of material just sitting there in cyberspace deserved an official release as a set of four CDs at a very reasonable price. It has to be said, the end result is rather impressive.

Aminet Set 1 is the culmination of this idea, coming in a satisfyingly chunky box with four silver discs sitting inconspicuously in their slots, Amiga delights bursting from each groove. For people worried about value for money, there's no need to – for the hungry, neigh greedy user, there are four megabytes of data here to be pillaged, abused and used. With 12,500 separate archives, you're not going to be bored with this for quite some time.

So what exactly is the whole collection made up of? That's an impossible question to answer in one page – there's that much on offer. Paint programs, sound modules, ray-traced graphics, spreadsheets, stereogram creators, 3D objects, icon replacements, animbrushes, games (both shareware and commercial demos), drivers for hardware, communications progs such as envoy network software, SaarAG and Fish disks, development software and more and more and more. Plus, there are charts of the most popular downloads so you can access the good stuff immediately – there's something here for everyone.



The collection's versatility is apparent. View Imagine-created artwork or...

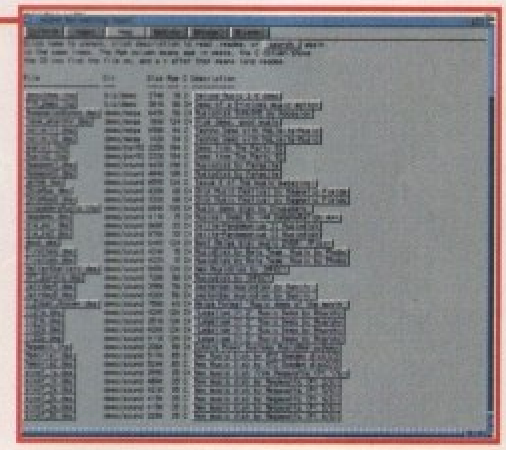


...hunt down a hardware driver you've always needed

SEARCHING

This amount of files may sound daunting to plunder through, but the compilers have also come up with an excellent system for finding out exactly what you want. On each disk is a full index for both the particular CD in your drive and a global index listing everything on the four discs.

To make things even simpler, there is a local and global search system where you enter a key word such as Imagine and the computer subsequently hunts through the catalogue quickly, presenting you with a rundown of any files that are connected. On one side, there's an archived file and on the other is a description of that particular file.



Run the search mode using a key word and an index is listed with all the relevant files

With some compilation discs you may well get a huge amount of data to surf through, but there's invariably hair pulling as the right viewers need to be set up and assigns fiddled with to make many of the programs work. And here is another strength of the Aminet discs.

The system has been set up so various viewers and other facilities that aid in the running, listening and viewing of files are already in position. In most cases, when you select the file you want a menu appears offering to either run/show the file there and then or extract it to RAM.

More often than not the system works surprisingly well and quickly. Run an animation, flick across to a game and then extract a file into RAM that can be used in Imagine as an object – this kind of versatility is satisfying and relatively hassle free, leaving you to enjoy the goods on offer. It has to be said, though, that there are times when things don't go to plan – the computer crashes or the file you have selected consistently fails to load up or extract.

In fairness to the collection, a substantial part of this data is shareware and public domain, so there has to be a certain amount of leeway granted to the compilers for any small glitches – PD and shareware material doesn't receive the play testing that most commercial software gets, so expect some oversights, mistakes or bugs. In some cases, using a file manager such as Directory Opus can help sort any cumbersome files. If you only have a slight interest in the Amiga and want to find out all about its ins, outs and capabilities, you can't go far wrong with this. The Aminet Collection is one of the most impressive packages I've had the fortune to come across, and I look forward to giving the next selection a glowing review if the makers can keep this standard up. Highly recommended. AC

Makes sense

Another enticing aspect of this collection is that once you've spent the cash, it's going to be cheaper in the long term than downloading all the stuff from the Internet. No enflamed phone bills, dodgy phone lines or slow loading because of spooling large amounts of graphics for viewing. Indeed, this collection makes perfect economic sense at only £29.99.

The bottom line

Product: The Aminet Set 1
Price: £29.99
Supplier: 17 bit Software
Tel: 01924 366982

Ease of use	**9**
Implementation	**9**
Value for money	**10**
Overall	**9**

Nothing but an old smoothy!



Part 10

Smooth scrolling is one of the most useful tricks an aspiring 680x0 Amiga coder can learn about. This month Paul Overaa starts explaining how it is done using assembly language

It's a well known fact that assembler code, even when reasonably well documented, is rarely easy to understand unless you have a good idea of what the code is supposed to be doing in the first place. Needless to say, this makes many of the tricks used by assembly language coders look far more difficult than they really are. A typical case in point is the job of making an Amiga display 'smooth scroll' and since it seemed to me this would be an area many of you would be interested in, I've chosen to devote some time to just this subject.

In fact, over the next two instalments I'll be modifying and extending the 680x0 code provided last month in order to produce a demo that vertically smooth scrolls an Intuition screen. Before explaining how this type of smooth scrolling is actually done, however, let me kill off one false trail.

Those of you who have the Amiga's graphics library documentation may have seen that there is a library routine called ScrollVPort() that can be used to produce display scrolling effects. The plain truth is that while, in theory, this routine could conceivably be used to produce smooth scrolls, the results obtained by using this function are just not good enough.

The autodocs themselves mention that the ScrollVPort() function is slow and can produce visible 'hashing' of the display. So, if ScrollVPort() can't be used, is there an alternative course of action available to us? The answer here is very definitely yes, but in order to appreciate it it's necessary to be clear in your mind how Amiga displays are generated.

All displays are created by allocating blocks of memory called 'bitplanes,' in which each 'bit' represents a pixel position on the display. Normal displays will contain a number of separate bitplanes and by taking the appropriate pixel bit from each bitplane, the Amiga's display hardware is able to generate a colour register number.

Values stored in each colour register determine the actual colours seen on the screen, and it's because a screen's colour register number range depends on the number of bitplanes being used that the colours available with different screen types varies. A one bitplane screen can only have two colours (corresponding to any single bit in the bitplane, being either a 0 or a 1), two bitplane screens can have four colours (each bit from each bitplane is combined to produce one of four values 00, 01, 10, or 11) and so on.

MEMORY

Although display bitplanes have to be stored in chip memory (because they need to be accessible to the custom chips) they do not have fixed positions as such. In fact, when a screen is opened the bitplanes will be allocated in any convenient area of chip memory available.

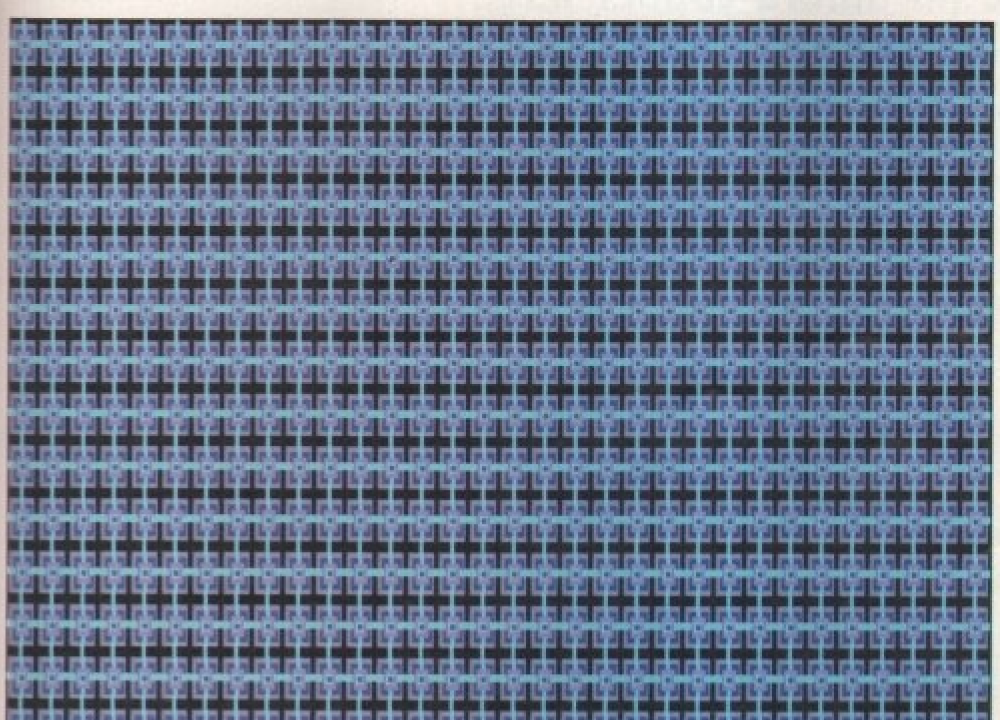
Needless to say this means the graphics system needs to have some way of identifying the position of these bitplanes and the structure used is called a BitMap. This structure can be found in the graphics/gfx.i include file and you'll notice from the description below that it contains space for up to eight bitplane pointers:

```
STRUCTURE BitMap,0
WORD       bm_BytesPerRow
WORD       bm_Rows
BYTE       bm_Flags
BYTE       bm_Depth
WORD       bm_pad
STRUCT     bm_Planes, 8*4          ;pointers to
the bitplanes
LABEL      bm_SIZEOF
```

Because the BitMap's bitplane pointers define the memory locations used to produce the display that appears on your monitor, you might expect that, by arranging for a display's bitplane pointers to be increased by an amount which corresponds to the pixel-width of the screen, it would be possible to shift the display memory downwards by one line.

Similarly, by decreasing those pointers by the same amount the display might be expected to shift upwards one line. Although very close to the truth, this doesn't work because a part of the story is still missing. While the BitMap structure certainly defines the initial display memory being used, the Amiga's graphics co-processor (the 'Copper') which handles the display generation doesn't actually collect its bitplane information from this source. Instead it uses copies of the bitplane pointers that have been embedded into a series of instructions called a 'copper list'.

Once Intuition has opened a screen and generated these copper instructions, the bitplane pointers held in the BitMap structure's are essentially redundant as far as the display generation process is concerned. The important bitplane pointer ➤



Some simple smooth scroll routines in action

values are those in the hardware copper list, so if bitplane pointer adjustment needs to be done quickly, this is the place to do it. In short we need to search this list, find the instructions which set up the bitplane pointers at the start of each display frame, and alter these.

To avoid visible display disturbance, it's obvious that such adjustments need to be made at times when the Copper is not trying to read the bitplane addresses itself. The secret here lies in realising that the Copper re-initialisation occurs as part of the house-keeping that goes on during vertical blanking intervals. A number of options are available but I'll discuss these when I deal with the scroll code itself.

As you increase (or decrease) a screen's bitplane pointers, the effect will be to bring new bitplane memory into the visible display area. If, therefore, you set up a normal sized screen, the result of any bitplane pointer adjustment will be to move the memory area being used for the real display outside the memory holding valid screen graphics information. This usually means that rubbish gets displayed on the screen, so the secret is to create an oversized display-memory area so that you only ever scroll within the bounds of whatever valid graphics data you've set up.

```
CALLSYS    ViewAddress,_IntuitionBase
           move.l        d0,a0                  copy to an address register
           move.l        v_LOFCprList(a0),a0
           move.l        crl_start(a0),a0       start of list now in a0

.search    cmpi.w        #$e0,(a0)              look at instruction
           beq.s         .searchend             found e0 instruction
           addq.l        #4,a0                  move to next instruction
           bra.s         .search                and keep searching

.searchendaddq.l         #2,a0                  move to 2nd instruction word
           move.l        a0,copperlist_p        and save pointer
```

Listing 1: The copper list searching code in all its glory!

CREATIONS

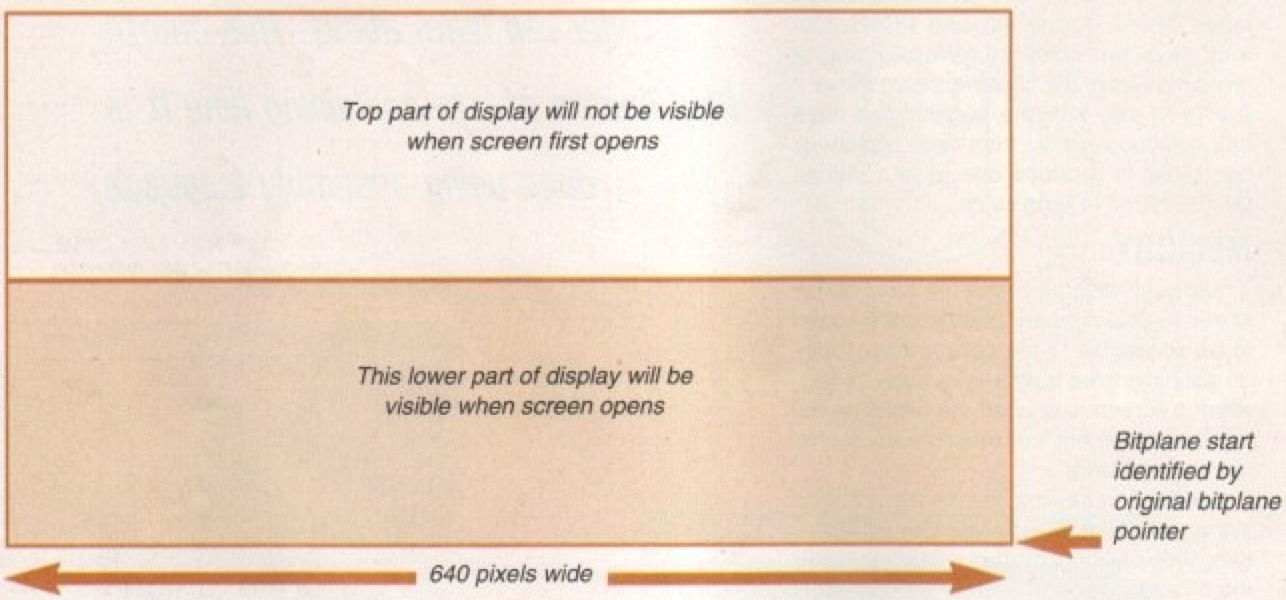
As far as screen and window creation is concerned, very few changes are needed to last month's code. The screen's title and title bar will be removed by setting an SA_Quiet tag to true and, because a display window is needed that is free from any of Intuition's system gadgets, I am going to turn the window into one of the 'invisible' borderless backdrop variety.

To implement these latter changes I set the WA_Borderless and WA_Backdrop tags to true, add false WA_DepthGadget and WA_CloseGadget tags, and modify the window's title and drag bar tags. All these tags are defined in the system headers but, as per usual, I'll be defining my own versions so that those of you without the official includes can still assemble the code. The end result is that you'll find these changed tag definitions incorporated into the window's tag list:

```
dc.l WA_DragBar,FALSE
dc.l WA_Title,NULL
dc.l WA_Borderless,TRUE
dc.l WA_Backdrop,TRUE
dc.l WA_DepthGadget, FALSE
dc.l WA_CloseGadget, FALSE
```

Screen and window sizes also have to be changed and here I have, somewhat arbitrarily, chosen to use a high-res 640 pixel wide screen with a height of 600 lines. The resulting arrangement of the screen's bitplanes in memory, relative to what you as a viewer would see on your monitor, is shown in figure 1.

Figure 1: Only the lower part of each bitplane will be visible when the screen first opens.



Searching the hardware copper list

Within the screen data that Intuition sets up there is a pointer to a View structure and the first thing we need to do is get the address of this using Intuition's ViewAddress() function. The result comes back in d0 and can be used immediately, because within the View structure there is a field called v_LOFCprList. This points to a cprlist structure which provides a pointer to the copper list the hárdware actually executes. The end result is that we identify the start of the required hardware list using this sort of code:

```
CALLSYS    ViewAddress,_IntuitionBase
move.l     d0,a0        copy to an address register
move.l     v_LOFCprList(a0),a0
move.l     crl_start(a0),a0        pointer to start of
list now in a0
```

Once we've got to this stage a loop needs to be used to locate the appropriate bitplane instructions. Copper instructions consist of two 16-bit words where the first word specifies the instruction type and the second specifies a data item. The instruction we need to locate is the first of a series of 'move' instructions that copy bitplane pointer values into the Amiga's bitplane hardware registers.

As the hardware registers can only hold 16-bit values it actually requires a pair of registers, and therefore two separate copper instructions, to store a full 32-bit memory pointer. It just so happens that the first pair of high and low bitplane registers set up in Intuition-created copper lists are those of the lowest numbered bitplane, conventionally known as bitplane 1.

The corresponding registers, called BPL1PTH and BPL1PTL, have absolute addresses of $00e0 and $00e2 above the custom chips base address, so what we need is a search loop which moves through a hardware copper list two words at a time, comparing the first word of each instruction until it finds one which starts with $e0:

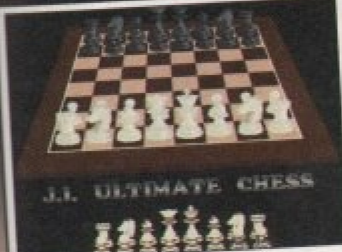
```
.search    cmpi.w    #$e0,(a0)    look at instruction
           beq.s     .searchend   found e0 instruction
           addq.l    #4,a0        move to next instruc-
tion
           bra.s     .search      and keep searching
```

When the loop terminates, the first bitplane oriented copper instruction has been found, so just add two to it so that a0 is pointing to the second word (the data word) of the instruction, and then you can store the result for future use:

```
.searchend addq.l      #2,a0          move to 2nd instruction
word
           move.l      a0,copperlist_p          and save
pointer
```

If we put all these ideas together we end up with the code shown in listing 1. Don't worry if some of the ideas seem like magic to start with – just concentrate on understanding the basis of what we're doing. The important thing is that this code fragment enables us to find out the whereabouts of the instructions which set up those bitplane addresses in the copper list Intuition places. The only bad news from your point of view is that you now have to wait until next month's instalment to see how we make use of this information!

THE EPIC SENSATION



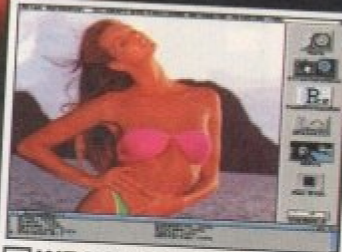
☐ CHESS & TUTOR

A complete chess program with intergrated tutorial. (includes speech) Order code JIT5-2



☐ DISK EXPANDER

Doubles the available space on your hard drive. Order code EPU5-2



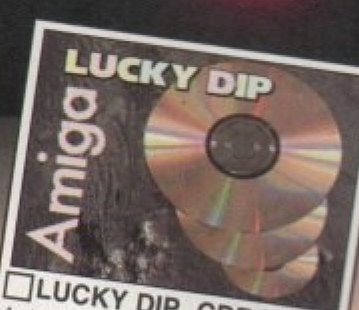
☐ WB3 BACKDROPS

A great selection of superb Girly pictures to place in the background of your Workbench. Give it that personal touch. Order code: WGB5-2



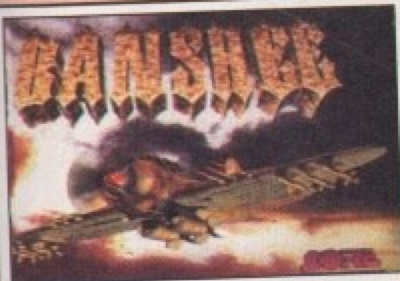
☐ COPY THAT FLOPPY

A set of the most powerful disk copying tools available on the Amiga. Ordre code :CPY5-2



☐ LUCKY DIP CDROM

A mixed bag of Modules, tools, Objects, SFX, GFX tools, Demos, Games and loads more. A bargain at just £5 +£1P&P Order: CDLDR49



☐ BANSHEE ☐ CD32 VERSION ☐ A1200 VERSION

State of the art 4 disk vertical scrolling shoot'em up with superb sound & graphics, and unbeatable playability. Rated over 90% in most magazines. *Only available when purchased with at least two other titles. Order code: BAN5-1

only £5 each



☐ CENTREFOLD SQUARES

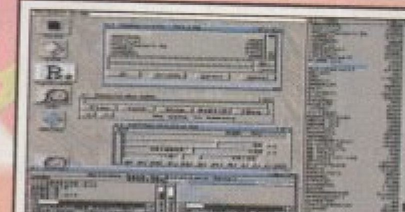
A great game for Adults!!! Order code:CFS5-1



☐ IMAGINE HINTS & TIPS

Imagine Hints, Tips, and tutorials is the perfect companion for Imagine users. Includes a 40 page book plus a free companion disk. Order code: HTT5-1

FREE BOX OF TEN TDK DISKS
WITH EVERY PURCHASE OVER £25.00



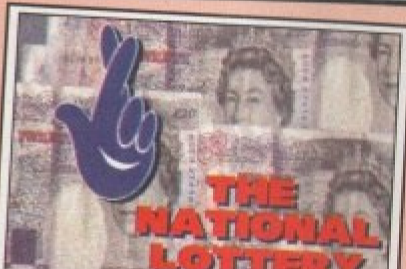
☐ AMIGA POWER TOOLS

new collection of tools for Workbench 2 & 3, Includes Hard disk tools, Virus killer, sound & graphics tools, text editor and loads more. Order code



☐

Play classic spectrum games on your Amiga. This pack includes over 50 All time classic Spectrum games. Order code: SPE5-3



☐ LOTTERY WINNER PRO.

Lottery Winner Professional attempts to predict the National Lottery draw with as little as just a few months data. Every week you input the winning numbers and lottery winner will predict the following weeks numbers. (OFFICIAL FULL LICENCED VERSION) Order LWP5-1



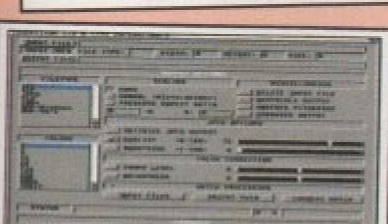
☐ ARCADE CLASSICS 2

8 All time classic arcade games. Pacman, Frogger, Asteroids, Space Invaders, Centipede, Missle Command, Q-Bert, & Omega Race. Code ARC5-2



☐ MAGIC EYE CONSTRUCTION

Create your own fascinating Magic eye images on your own computer. supplied complete with viewer and exaples. Great fun for all the family. Order code RDS5-2



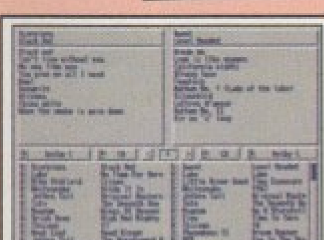
☐ GRAPHICS CONVERTERS

The complete graphics manipulation package for Workbench 2 & 3 machines Order code GFC5-2



☐ HARD DISK TOOLS

An essential purchase for Hard drive users. Includes HD Backup, Salve, menu system and more. Order code HDT5-2



☐ CATALOG SYSTEM

The complete cataloging system for Disks, games, CD's, videos etc Code CTG5-3



☐ WORD FINDER PRO.

This is the most powerfull Word search / Cross word solver available. Over 58,000 word dictionary, and you can add your own. Order code: WFP5-2



☐ STARTREK TNG

A superb new Workbench enhancer kit that turns your Workbench into a virtual bridge. ENGAGE!. Includes samples, tools, and images. Order code:TNG5-2

Victoria Centre.
138 Victoria Rd,
Swindon, Wilts.
SN1 3BU. UK

Main Order Hotline.
01793 490988

Order Hotline.
01793 514188

PRIORITY ORDER FORM
Name ____________
Address ____________
____
____
Amiga Model ____________
Payment Method ____________
Credit card number ____________
Exp date ____________

ALL TITLES ARE COMPATIBLE WITH ALL AMIGA'S UNLESS STATED.

ORDER VALUE		
Please send me..		£.
Total goods value		£.
Postage & Packing		£.
Amount enclosed		£.

OVERSEAS ORDERS
Overseas orders are welcome, but there is a minimum order of 3 titles, and please add £1.00 per item.

COLLECTING YOUR ORDER
You are welcome to collect your order from any time between 9:30am - 5:30pm Monday - Saturday.

ORDERING BY POST
Simply send us your order, listing the items you require, the total cost, and your name & address with payment either by cheque or Postal Order.

ORDERING OVER THE PHONE
Call any time between 9:30 & 5:30 Monday - Saturday with your Credit card details and the items you would like to order.

POSTAGE & PACKING
UK & Mainland. add a total of just 50p Overseas. Please add £1.00 per title.

LICENCED SOFTWARE
Most titles advertised here are Licenced exclusively to us, and so are not available from other software outlets.

CONDITIONS OF SALE
Goods are not sold on a trial basis. E&OE. Your statatory rights are not affected.

TECHNICAL SUPPORT
With a dedicated Technical supports line we offer 30 days free technical support to all our customers on all our software titles.

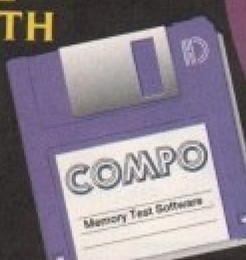
SATISFACTION GUARANTEED
We now have a powerful new order processing system which ensures that over 90% of orders are processed within 48hours. And with over 80,000 satisfied customers you can be sure of a good service and fast delivery.

PRODUCT KNOWLEDGE
8 full time Knowledgable staff to assist you.

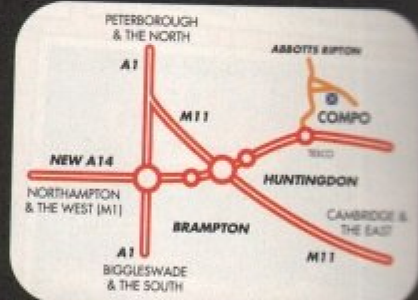
RELEASE THE POWER AN AMIGA COMPUTING

THERE ARE NO PRICE CHANGES DUE TO CURRENT MEMORY SHORTAGES. THESE ARE TODAY'S PRICES AVAILABLE TODAY!

ALL MEMORY BOARDS COME COMPLETE WITH FREE DISK INCLUDING MEMORY TEST SOFTWARE.



A MEMORY UPGRADE WILL UNLOCK THE FULL POTENTIAL OF YOUR AMIGA AND ALLOW YOU TO DISCOVER NEW HORIZONS YOU NEVER NEW EXISTED!



BRING YOUR AMIGA TO US FOR ON-THE-SPOT FREE INSTALLATION

Save on the P&P. Pick up your upgrade and save on delivery charges. What's more, bring your computer with you and we will fit your memory upgrade and test it for free!. Personal callers are very welcome but please phone before visiting to confirm the item you want is in stock. We have disabled access.

THANKS TO THE HUGE BUYING POWER OF AMIGA COMPUTING WE CAN GIVE OUR READERS THE CHEAPEST HIGH QUALITY AMIGA UPGRADES AND OTHER ESSENTIAL ACCESSORIES FOR YOUR AMIGA.

MOUSE



£7.99

A superb replacement Amiga mouse.

This Compo mouse is a major enhancement because it uses micro switches for the buttons. Our mouse also has a much higher resolution - 280 dots per inch which means you need much less desk space and you get a much finer control.

12 GOOD REASONS TO BUY FROM AMIGA COMPUTING

All the products offered have been carefully selected by us as being the best in their class. But top quality does not mean top price. Thanks to our huge buying power, we can deliver to our readers the best products at the best prices.

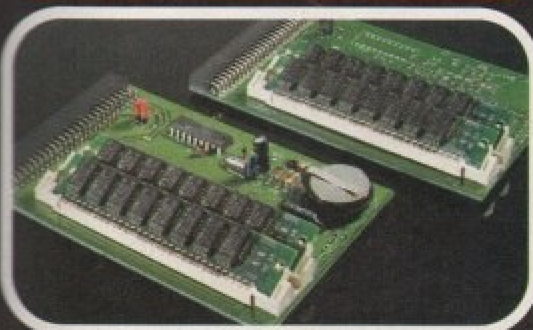
1. All memory boards are populated with memory.
2. All memory boards are individually tested.
3. Support from a top engineer is just a phone call away.
4. All memory upgrades are simple to fit, trap door upgrades - no soldering and no need to open your Amiga's case.
5. No minimum order and no credit card surcharges.
6. Memory upgrades carry a five year warranty.
7. 28 day no-quibble money back guarantee.
8. We are here until 8pm every day during the week.
9. 24 hour order hotline.
10. Because we only sell a few items, your order will normally be supplied straight from our stocks.
11. Your credit or debit card will not be processed if the item you order is not in stock.
12. Experienced sales staff are on hand for when you order or if you need advice before placing an order.

TURBO DELIVERY

NEXT DAY DESPATCH AVAILABLE FOR ORDERS PLACED BY TELEPHONE ONLY.
POSTAGE AND PACKING FOR TURBO DESPATCH IS £5

OF YOUR AMIGA WITH MEMORY UPGRADE!

AMIGA A500



Upgrade to 1Mb **£12.99**

Upgrade inc.Clock **£17.99**

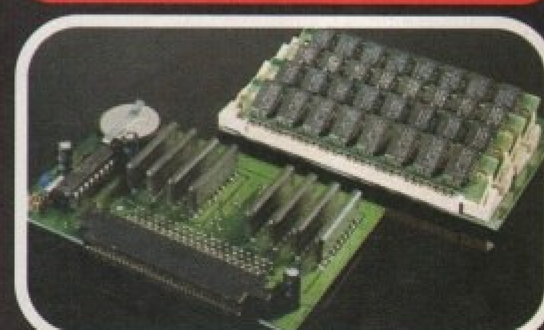
AMIGA A500+



Upgrade to 1.5Mb **£13.99**

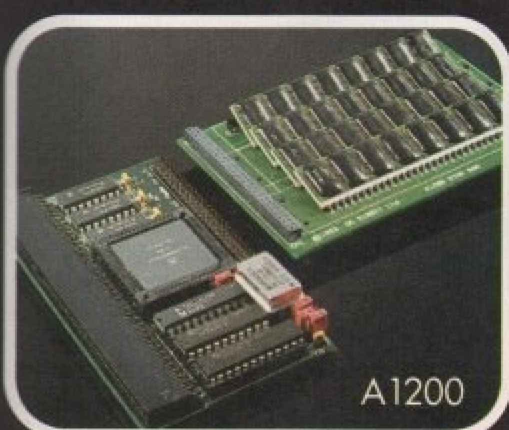
Upgrade to 2Mb **£20.99**

AMIGA A600



Upgrade to 2Mb **£22.99**

Upgrade inc.Clock **£27.99**



A1200

AMIGA A1200

Our A1200 upgrades come complete with clock and optional 25Mhz maths coprocessor. They fit in the trap door and feature full 32bit Fast Ram.

Upgrade to 4Mb **£129.00**

Upgrade inc. Math **£154.00**

Upgrade to 6Mb **£189.00**

Upgrade inc. Math **£214.00**

ORDER HOTLINE

01487 773582

Lines are manned from **Monday to Friday 10am to 8pm** and on **Saturday 10am to 4pm**.

If you call outside these hours you can place an order by answer phone - just give the information on the order form in the order it appears. You might find it easier to complete the order form before calling so that you can read directly from it.

Please allow 28 days for delivery from when we receive your order. For non receipt of goods phone 01487 773582 Monday to Friday between 10am and 6pm.

COMPO

AMIGA COMPUTING SPECIAL OFFERS
COMPO SOFTWARE LTD.
UNIT 3, GREEN FARM, ABBOTTS RIPTON,
HUNTINGDON, CAMBS PE17 2PF

PRIORITY ORDER FORM

Order by telephone by calling **01487 773582 Mon to Fri 10am to 8pm / Sat 10am to 4pm.**

1. ORDER ITEMS (✓)

- ❑ Mouse.....£7.99
- ❑ A500 upgrade to 1Mb.....£12.99
- ❑ A500 upgrade to 1Mb inc.clock.....£17.99
- ❑ A500+ upgrade to 1.5Mb.....£13.99
- ❑ A500+ upgrade to 2Mb.....£20.99
- ❑ A600 upgrade to 2Mb.....£22.99
- ❑ A600 upgrade to 2Mb inc.clock.....£27.99
- ❑ A1200 upgrade to 4Mb.....£129.00
- ❑ A1200 upgrade to 4Mb (Copro)...£154.00
- ❑ A1200 upgrade to 6Mb.....£189.00
- ❑ A1200 upgrade to 6Mb (Copro)...£214.00
- ❑ A1200 CoProcessor only.....£27.00

TOTAL GOODS VALUE		
P&P (1 Item = £2.00 2 or more Items = £3.00)		
TOTAL ORDER VALUE		

Cheques Payable to Compo Software
Please send to: Amiga Computing Special Offers.
Compo Software Ltd. Unit 3, Green Farm,
Abbotts Ripton, Huntingdon, Cambs PE17 2PF

2. DELIVERY DETAILS

Delivery Address__________

__________ Postcode__________

3. CUSTOMER DETAILS

Name__________
(This should be the name written on the Cheque or Credit Card if payment by this method).

Telephone No: (______) __________

4. PAYMENT DETAILS (✓)

Credit Card

VISA ❑ ❑ SWITCH ❑ DELTA ❑ Connect ❑

Card Number

Switch Issue No__________

Expiry Date ____/____/____

Signature __________

Cheque (4) ❑ Postal Order (4) ❑

Cheques Payable to Compo Software

Off to the races



This 100 frame animation would take over 21 hours to render on the A4000 and a Cobra would race through it in only 2.2 hours, but without a batch option, overnight rendering would waste at least six hours of precious time

Stevie Kennedy tries Cobra AXP and gives his Amiga a taste of the world's fastest microprocessor

We all know that 3D ray tracing demands powerful processors, and many Amiga owners would kill for a 68040 to make Imagine, Real 3D or Lightwave really buzz. However, in the big bad world of commercial rendering, even the Amiga's fastest chip is a non-starter.

When a production company needs several minutes of broadcast quality graphics in a hurry, only the Silicon Graphics machines have been able to produce the sort of speeds required. The Raptor (reviewed in our December '94 issue) changed that and gave the Amiga world some big guns of its own, and now Cobra AXP brings top-end professional performance tantalisingly closer.

You'll still pay about £7,000 for the privilege, but with Cobra you get 64Mb RAM, a 1Gb hard drive, and the DEC Alpha processor running at a whopping 275MHz. All this in a neat tower system complete with 14 inch multisync monitor, keyboard, mouse, and Windows NT.

Windows? Yup, 'fraid so. Cobra runs the DEC Alpha version of Microsoft's networking front-end and uses its ethernet card to talk to the Amiga. By running a PC version of Lightwave's core rendering engine through an emulated MS-Dos window, Cobra is able to work in partnership with the Amiga, even though running under an alien environment.

The Amiga side needs only a copy of Lightwave, NewTek's Screamer Net software, and a suitable ethernet card. With the network connections made, the user runs Lightwave then uses the Screamer Net panel in Layout to initialise the Cobra, send data to it, and collect the rendered images it sends back.

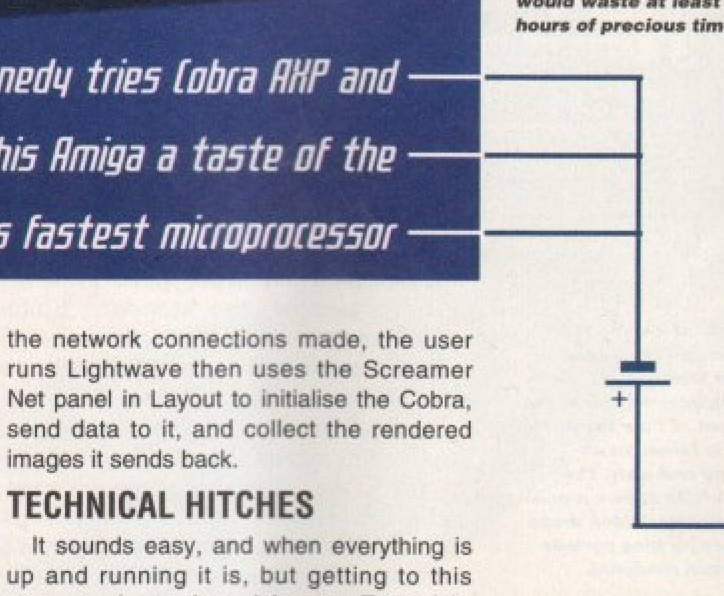
TECHNICAL HITCHES

It sounds easy, and when everything is up and running it is, but getting to this stage can be a minor nightmare. To be fair, we were testing with a beta copy of the Screamer Net software and an alpha test copy of the Lightwave engine on the Cobra side, and we didn't have the benefit of an automatic installation routine you'd find in a finished product. When the quirks are ironed out, there's no reason to believe that the Cobra won't function as a virtual plug-in-and-go machine, but for the moment the user is faced with a lot of messing around with host names and IP numbers before the ethernet side of things is happy. With full release versions of the software, Screamer Net in particular, users will hopefully find that this part of the initial setup procedure is taken care of behind the scenes.

Once operating, the link between the two machines works very reliably and it's possible to mess the system around without confusing the network. Worry-free hands-off reliability is important when you might want to leave the machine rendering overnight, though this kind of operation does expose a few damning weaknesses in the Screamer Net software.

The scenes which make up a complete 3D animation don't all have to take hours and hours to render, not even with the Alpha chip, but Screamer Net is mostly manually operated and has no facility for batch processing. This means that if a large scene is set to render overnight it might take only a few hours, after which the Cobra and Amiga are sitting idle and using ➤

The sample textures example scene renders in 17 minutes 50 seconds on an A4000, and only 1 minute 41 seconds on the Cobra. That's a 964 per cent speed increase!



Alpha processor

When the Digital Equipment Corporation (DEC) began work on its 64-bit Risc chips a few years ago, they were only the latest in a long line of companies who had trodden the reduced instruction set path. By 1992, however, the DEC Alpha had been recognised by the Guineas Book of Records as the world's fastest microprocessor, and it gets faster all the time.

Full 64-bit from start to finish, the chip is capable of up to two CPU instructions per clock cycle, giving the Cobra a maximum theoretical performance of 550 millions of instructions per second (Mips) compared to the A4000's 18 Mips. What's more, because DEC had just dropped development on their failed Prism processor, they decided the next family of chips would have a 25-year development life, which means the current chips could end up running at over 1000 Mips.

up electricity for no good reason.

To set up a scene for use with Screamer Net, the user loads it as usual in Layout, then brings up the network panel using the SN button found in later versions of Lightwave. He or she then has to go through a ridiculous sequence of initialising the Alpha chip (fair enough), clicking on buttons to send the scene, object, and image data to the Cobra, another to tell it to load the scene, and a final button to start rendering.

PREFERRED ASPECTS

Separate buttons are available to send just the object, image or scene data across in case changes have been made to one of these since the scene was last sent to Cobra, but though this is useful, a batch render option would have been much more welcome. With the machinery and software at your disposal when using Lightwave on the Cobra, it's very frustrating not to be able to give the beast a long list of scenes and tell it not to bother you until it has finished them. ARexx scripts could be used to automate things, so why didn't NewTek take this option?

A second complaint is the amount of time the Cobra chip sits idle, even *during* rendering, while the data is passed between the two machines and written to disk on the Amiga. For some reason, the Screamer Net programmers have made it possible to link up to huge machines with super-fast chips, massive hard drives, and oodles of RAM, and then make use of all this hardware only 50 per cent of the time.

For example, the standard Space Fighters scene from the Lightwave samples takes between 44 and 70 seconds per frame when rendered on a 68040 at medium resolution and no anti-aliasing. The Cobra is often slower.

Yes, slower. Data can be passed across ethernet connections at megabytes per second, but Lightwave takes 40 seconds or more to grab the rendered data from the Cobra and write it to disk, during which time the Alpha chip is doing absolutely nothing.

STAGE FRIGHT

Lightwave has always been a bit slow off the mark when it goes into the 'integrating pixels' and 'writing RGB data to disk' stages, but as there's a version of the core rendering engine on the Cobra and an awful lot of spare space on its hard drive and in its 64Mb RAM, you'd think someone would have thought it a good idea to press this excess capacity into service.

Rendering the frames mentioned above on the Cobra takes between three and five seconds (jings!), which makes it all the more frustrating when the rest of the process makes this up to 45 seconds per frame. Until the basic operation of Screamer Net and Lightwave are changed to make more use of the Alpha chip, the system as it stands is surprisingly inefficient.

With more complex frames which require proper ray tracing or more intensive calculations, the efficiency of the system improves, but there's always at least 30 seconds per frame lost, and when you render 300 or more this adds up very quickly. Having said that, when you watch a frame which would take the A4000 18 minutes churned out in only 62 seconds by the Cobra, it's difficult not to step back in awe.

The control panel

1. The Screamer Net process begins with a click on the Init button, which instructs the Amiga to search for available processors on the ethernet connection

2. Next, the user uses this bank of buttons to send a scene and its objects and images to the Cobra. This takes less than a minute for most scenes

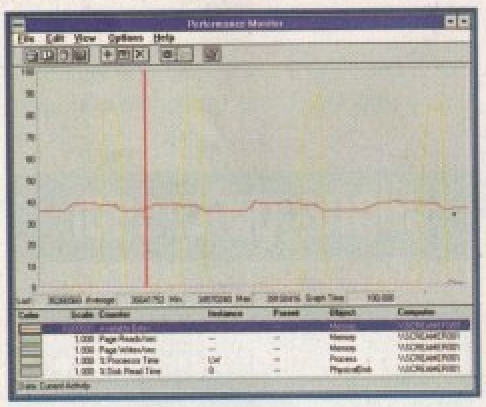
3. The final panel is used to load the scene into the Cobra's remote copy of the Lightwave rendering engine, plus buttons to begin rendering or shut Screamer Net down

4. Any available processors up to a maximum of eight will be shown in this window and their status is indicated. Screamer Net can use more than one type of processor in two or three networked machines

5. The individual buttons for sending image and object files are useful when you are experimenting with a scene, and change just a couple of things before rendering again

6. Frame advance can be set to manual or automatic as in Lightwave, but the independent setting is best when you have multiple processors, as they will all work away on their own frames, thus reducing waiting periods





A performance monitor running on the Cobra under Windows NT gives a graphical display of the amount of time the Alpha chip is forced to sit around and wait. The yellow line shows processor activity, which drops to zero for long periods between rendering

Keeping up with the big boys

In full operation the Cobra is about 20 times faster than the 68040-based A4000, though some of the performance is squandered by the networking software. Our 62 seconds example was based on actual rendering time. Once the PC and Amiga Lightwave programs had finished shuttling data around and writing it to disk, this became 111 seconds per frame, a 79 per cent slow down.

Don't get me wrong – Cobra is one mean piece of equipment which at the £7,000 price mark blows Raptor out of the water and leaves all other desktop power stations for dead (it eats Pentiums for breakfast), but the fact that it could be a lot faster with more efficient disk writes on the Amiga Lightwave side is something any prospective owner would find as frustrating as I did.

Smaller companies and very wealthy freelance graphic artists, however, will see Cobra as a chance to join the big leagues without spending hundreds of thousands of pounds. Indeed, a suitable summary for this product is that you could buy a complete network of machines and software for the price of just one (slower) Silicon Graphics Indigo and one copy of its superb but ludicrously expensive software.

Think about it. For the cost of a small business loan, you could be the next Industrial Light and Magic.

The bottom line

Product: Cobra 275AXP
Supplier: Carrera Inc
Price £7,000 approx
Phone: 0101 714 707 5051

Ease of use	**8**
Implementation	**6**
Value for money	**9**
Overall	**8**

SYSTEM

Your essential guide to Amiga gaming

Cleared for take off

Here at last, the state of the art sim gets the full System flight test

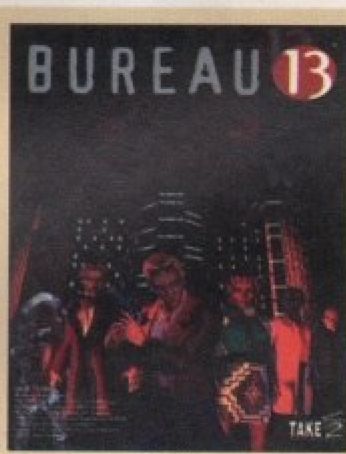


Under the system spotlight

SYSTEM ANALYSIS

Bureau 13

Gametek are busily working on the Amiga version of Bureau 13. It's a high-tech adventure based on the paper role-playing-game by Richard Tucholka. The scenario takes place around a highly classified government agency whose aim is to wipe out all forms of paranormal and supernatural phenomena. You can choose your team from the six available such as The Hacker, an expert in computers, biophysics and weapons or The Vampire, with superhuman powers and the ability to morph into mist. The puzzles vary depending on your team.

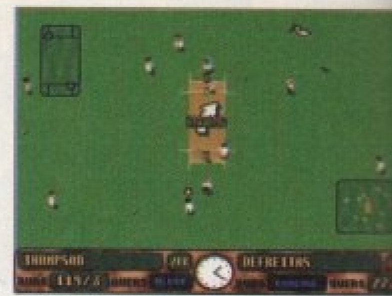


Atmospheric adventures in Bureau 13

Howzat!

There are cricket games galore at the moment, especially with Team 17 working on their latest project, Final Over, Arcade Sports Cricket. The game is the follow-up to Arcade Pool and King Pin and continues their Arcade sports series. At another bargain price of £12.99, it promises that 'while being the most comprehensive game of its ilk, it still remains easy to play and forever entertaining.'

It also boasts intricately designed and animated sprites who throw, run, catch, bowl and even celebrate. All th[e] players have different abilities such a[s] individual bowling skills, strength an[d]



Aah, look at the little sprites – Final Over looks like it will be a very fun game

system online

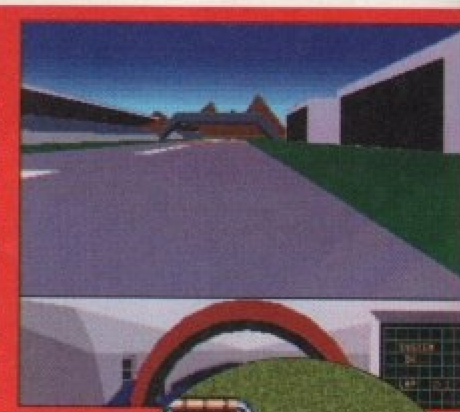


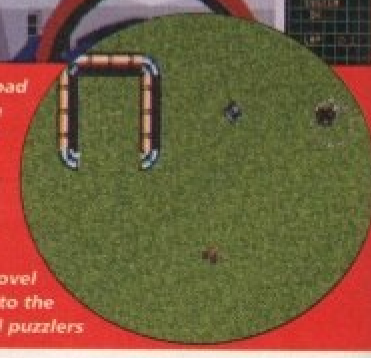
Summer is coming and the Amiga games scene is positively blooming. This month, Tina Hackett takes a look at what's happening at Team 17 and Arcane.

Lap it up

There is a racing game on the horizon from Black Legend/ Kellion Software called Leading Lap. It is a polygon racer that has you competing in illegal road races. As you race through the city you'll have to avoid all the other traffic and obstacles that get in your way. It also employs a 'fairness' system so if you're very good the computer keeps up to your pace, but if you're failing miserably the cars are put back to your level and lap.

Also from Kellion is a rather bizarre puzzler game that revolves around Ants – strange but true!


Illegal road racing in Leading Lap


A novel twist to the usual puzzlers

Arcane's games

The Amiga market looks set to be bombarded with some top quality software over the coming months, thanks to Kent based company, Arcane.

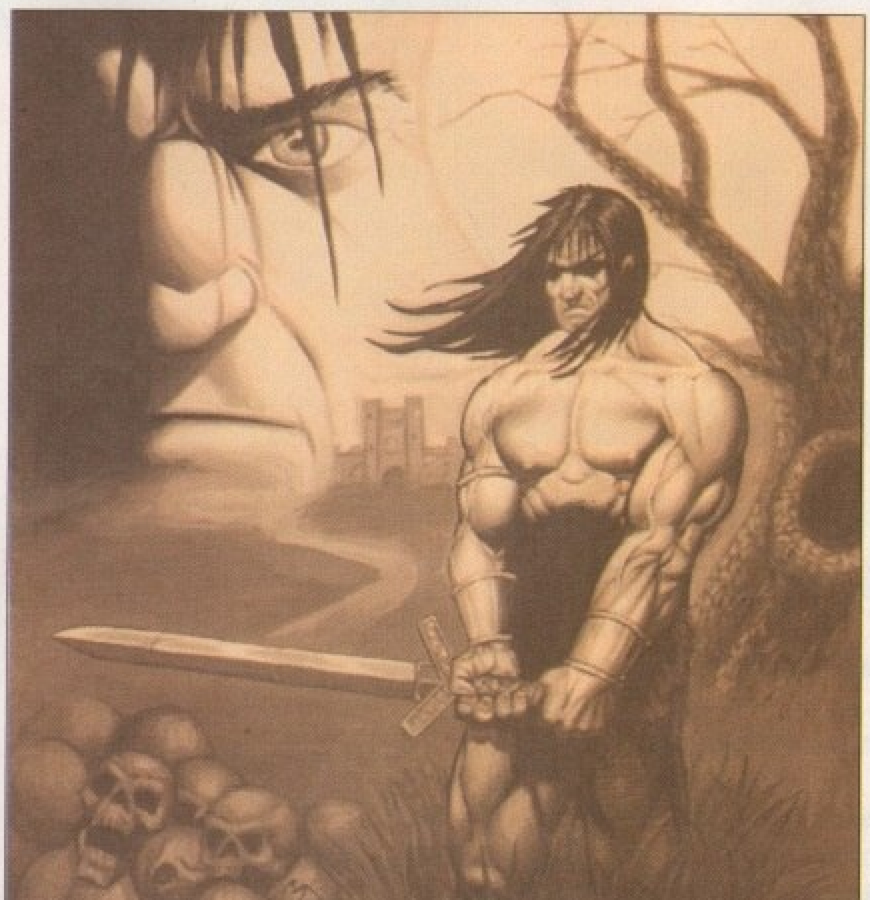
A release is imminent of their very stylish race-'em-up Turbo Trax and work has already started on the AGA version. A pinball game is also in progress at the moment and boasts an impressive list of stats and features. Due for release in September, this game will have an optional split-screen view in multi-ball allowing you to see all balls at one time, a high/low-res toggle, triple layered tables and a larger LED dot matrix scroll panel.

It also promises to be very authentic with left/right/up nudge, realistic ball motion and collision. Other features will include up to four flippers on each table, three balls running at full speed, drop-targets, kick backs and new ideas such as whirlpools, magnets, flip-up ramps and spinners outholes. The game will have over 1000 frames of LED animation per table, animated balls including light-sourcing and larger tables – 320x640 all in 256 colours.

They also have an arcade/adventure coming soon based around Robert E. Howards' Hyboria Chronicles. Called Conan the Conqueror, the story follows on from Conan the Destroyer. You play Conan and find yourself locked underground in a dungeon and it is your quest to get the throne back from the evil wizard Xaltotuen.

It will be viewed from an isometric point and already looks as if it will have some very impressive graphics. It's being coded by Monoceros Design of Finland and looks set for a June release.

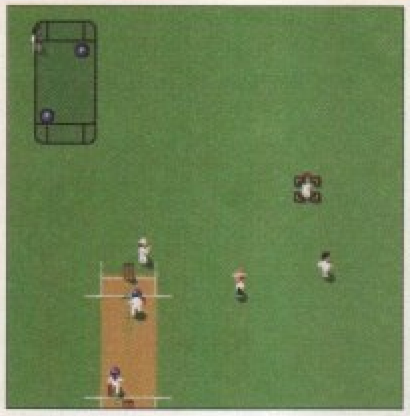
It is also rumoured that Arcane are working on a Thunderhawk-style helicopter flight sim and we'll be bringing you more news and previews on these developments as they happen.


Conan the Conqueror will be a highly atmospheric title with top quality graphics

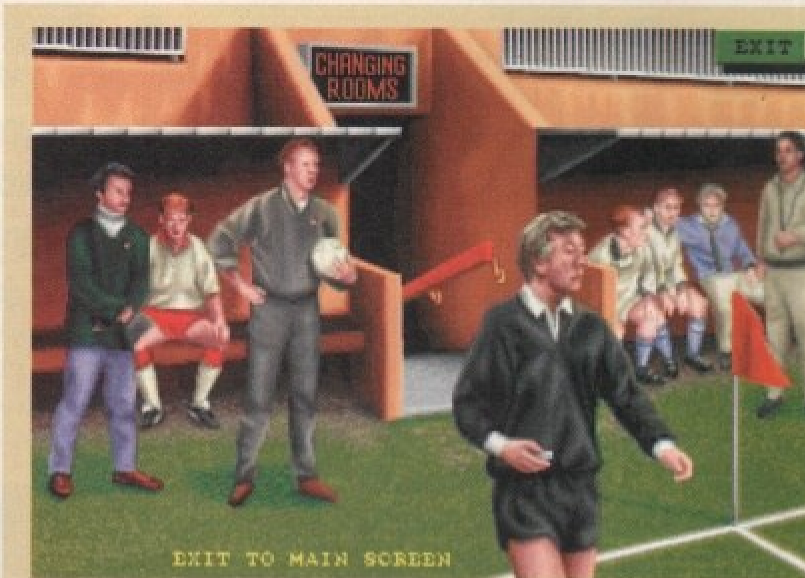
pace. There are many predefined teams including county and national – and if these don't suit then you can create your own. Realistic sound effects and a detailed scoreboard will add authenticity.

Martyn Brown, Creative Director for Team 17 stated: "The emphasis is firmly on delivering a completely playable, fun simulation in the mould of our other arcade sports series titles. Final Over certainly has plenty of amusing animations and all the features that cricket fans demand."

Final Over is due out for AGA Amigas and on CD32 very soon.



All the players will have different attributes



Graphics look like they will be very appealing

Thalion's beat-'em-up

Thalion have a beat-'em-up in progress and as yet it hasn't got a name, but things are already looking pretty good at this stage. It's more than likely to be CD32-only and is a first effort from programmer, Kwok Man.

There will be 32 fighters in all and each will have their own (and easy to find) special moves. As well as these, there will be Super Moves which can be carried out once your character has pulled off a particular combination.

Another feature to be included is the Seesaw Fight where instead of having two energy bars, there is only one split into two colours.

When you hit your opponent his colour goes down and yours goes up, but if he hits you it goes back to the middle. This is a fairer system and means matches could last for ages for two equally-matched opponents. A tag team mode will also be included.

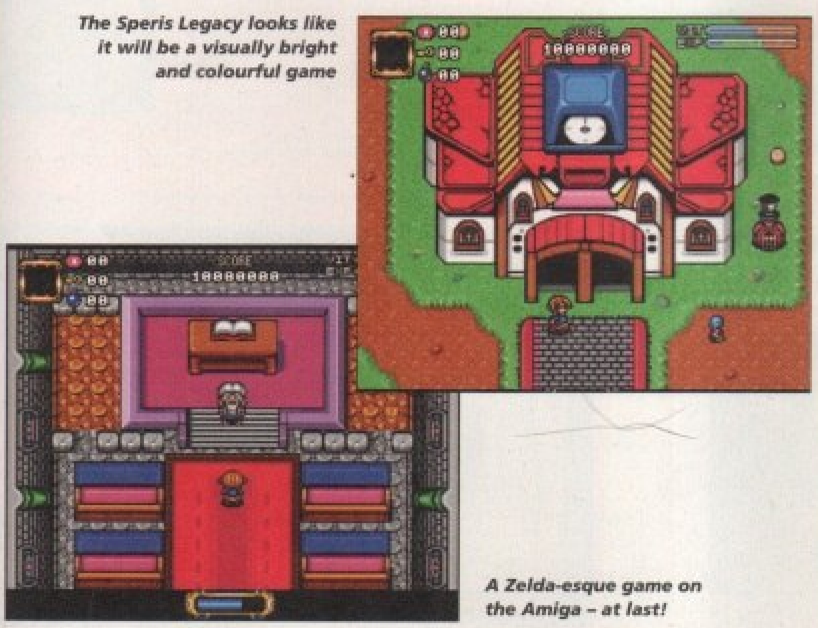
The Speris Legacy

There's always been a bit of a gap in the Amiga market as far as Zelda-style games go. That is until now. Binary Emotions are working on a game called The Speris Legacy which will be in much the same vein. This comes at a welcome time for Team 17, who are publishing the game, because their earlier plans to release a similar title on the Amiga, called Witchwood, have been shelved.

You play Cho and have just inherited the throne of Speris off your chum Kale (who has just been murdered by his evil brother who wanted the throne for himself). Gallus (his bother) is now after your blood and you, being an all round good guy, vow to crush Gallus and restore order. You then have to wander around the land, solving the puzzles and talking to the other characters.

From what we've seen from the screenshots it will be a very nice looking game, with brightly coloured graphics. The adventure will take you over many locations including Sharma City – a place reserved for Royalty – Cow Tree Island – an island inhabited by intelligent but mad people and where the cows do their business from trees (oh, very nice!) – and Makiah, Garden of O'Talia. Look forward to The Speris Legacy early this Summer.

The Speris Legacy looks like it will be a visually bright and colourful game



A Zelda-esque game on the Amiga – at last!

First Impressions

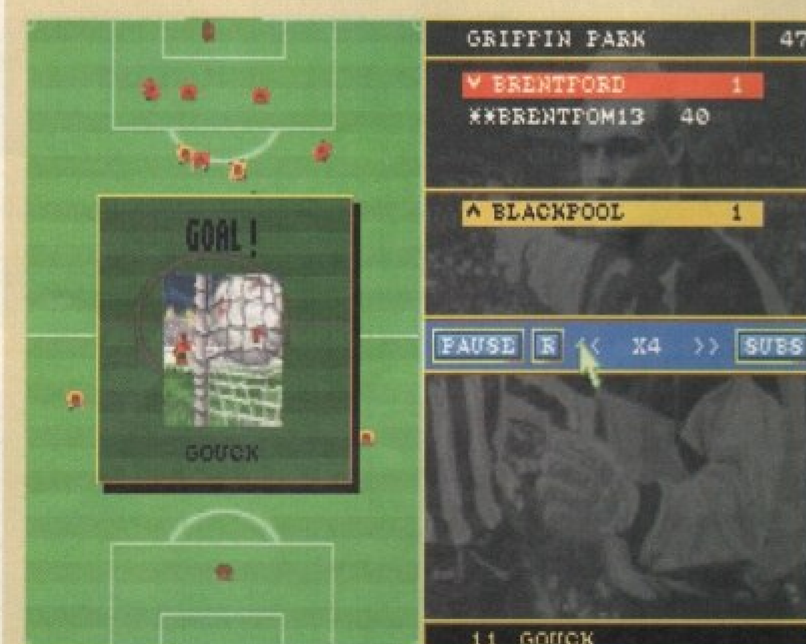
Impressions, the people behind those rather serious strategy games, have gone for a change in direction with their latest venture, Ultimate Soccer Manager. Although there are always plenty of management games around, Impressions believe this one is going to be different as they have explored three new angles. These are match view, development of the ground and stadium, and the seedier side to the game!

The programmers all felt that with some previous management games, the actions of the manager, such as changing the formation mid-match, didn't really affect the game. They've rectified this with an over head match view system which shows how effective your tactics are and how your changes are affecting the game.

The stadium development will also be more detailed, with a full business option. The aim is to make your ground as profitable as possible with club shops, bars, fast food outlets, training ground and effective access to the ground. You will also be responsible for setting club merchandising prices as well as the gate prices. Ultimate Soccer Manager will show your empire growing from your basic ground to a first class stadium.

USM has a totally new aspect to it with its dirty tricks elements and will give you the opportunity to play underhand! You can rig matches, offer bungs to other managers to get the player you want, and bet against your own team winning – be warned though, you do run the risk of an investigation by the FA.

Other features will include a Talent Scout Option, Press Conferences, Sponsorship and advertising, and Bank Loans. Publishing is by Daze and USM should be available very soon.



Ultimate Soccer Manager explores the seedier side of the game

System Selections

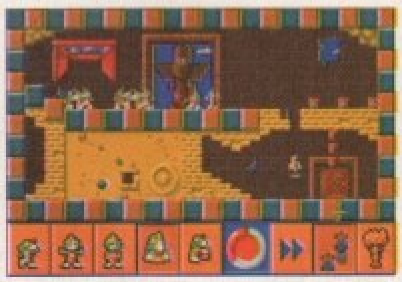
With all the new releases available, you're probably wondering which ones to spend your hard-earned cash on. Well, just take a look below......

Shadow Fighter



As far as beat'-em-ups go on the Amiga I've been more than pleasantly surprised by Shadow Fighter. It could go from strength to strength after the release of the AGA version and finally take the beat-'em-up crown away from games like Body Blows and Mortal Kombat. Shadow Fighter is, quite simply, thumping good fun.

The all New World of Lemmings



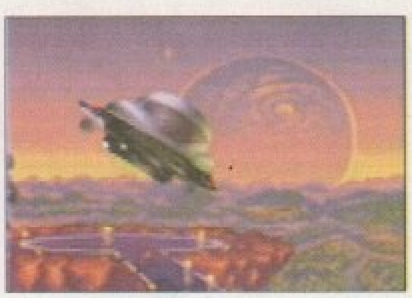
Anyone who played the original game and liked it will love to get their hands on a copy of Psygnosis' latest offering. It's what you might call a conglomeration of old and new. The old being the original and incredibly addictive gaming concept, the new being the advances in graphics and sound. These two elements combined make for a rip-roaring, action-packed 90-level puzzler that just gets better and better the more you play.

Skeleton Krew



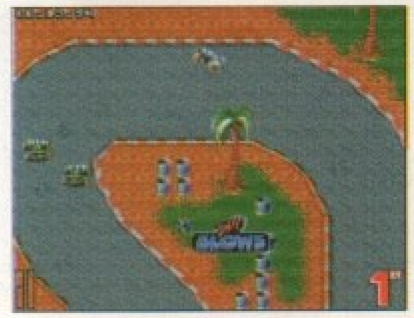
This is my first musical highlight of 1995 and it's all thanks to Core Design who have obviously got the intelligence to use someone who is skilled at creating original pieces of high quality music that belong in the '90's and not the '80's. The graphics are very impressive and it's obvious they've been created by someone with a love for science fiction films and comic books.

Extractors CD32-Rom



Extractors is graced with some of the best graphics I've ever seen for this type of game and is packed to the brim with more addictive gameplay than you can possibly cope with. There are literally thousands of hours of play contained within the game. Fans of Diggers will no doubt be interested in Extractors, but I hope Millennium gain a few more fans through this release and people don't ignore it this time around.

All Terrain Racing



On the balance of things it beats its predecessors because of a greater long-term incentive. The rewards of winning the money, then spending it to soup up my motor filled me with a boyish flush of satisfaction – and that's the sort of thing to keep a player going. It's got the looks, the features and the speed to take the chequered flag. Go forth and spend your money.

The scores on the doors

A guide to how our revolutionary scoring system works...

We're sure many of you are now familiar with our new scoring system, but for those reading *Amiga Computing* for the first time and those who might have forgotten exactly how it works, here is our guide to the System scoring, err system.

In our opinion, review scores have lost their context as a percentage; some products receiving scores which were only a few percentage short of being the "perfect" game, when in truth they were only marginally above average.

OK, so the scores might seem unnaturally low at first, but that's only because other scoring systems tend to be on the high side and perhaps not as comprehensive or honest as they could be.

In the long run you'll receive a more concise and reader-orientated review that's geared towards the consumer.

0-20 This is given to the lowest of the low

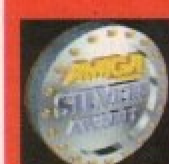
21-30 An all-round poor game that may have a single saving grace

31-40 Just below the average, perhaps let down by a few indiscretions.

41-55 Games of this score are roughly average with 50 being a perfectly average score.

56-66 This is an above average game and is worth buying. For this reason it would be awarded the BRONZE award.





67-77 A game of high quality that you as a reviewer would have no reservation in recommending. Anything of this ilk would be awarded the SILVER award.

78-89 A brilliant title. Definitely worth buying and almost the definitive of its kind. This type of game would receive the GOLD award.



90-100 The best in its genre. This benchmark title receives the PLATINUM title.



SILICA ARE NOW IN 18 BRANCHES OF DEBENHAMS — SEE BOTTOM PANEL FOR DETAILS

AMIGA CD32 CRITICAL ZONE



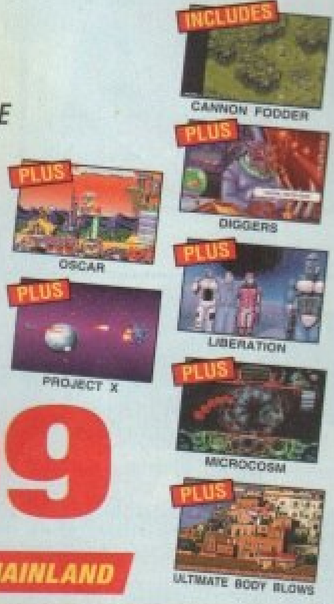
32-BIT SYSTEM
PLUS! 7 CD TITLES

- 32-BIT POWER
- BUILT-IN DUAL SPEED CD-ROM DRIVE
- 16.8 MILLION COLOURS
- ALSO PLAYS AUDIO CDs
- 11 BUTTON CONTROLLER
- TITLES AVAILABLE FROM £14.99
- OPTIONAL SX1 COMPUTER MODULE (SEE BELOW LEFT)
- OPTIONAL FULL SCREEN VIDEO CD MODULE (SEE BELOW LEFT)

SAVE £50 OFF RRP
SILICA PRICE NOW ONLY INC VAT

PACK INCLUDES:

CD32 CONSOLE	RRP £249.99
CANNON FODDER	£29.99
DIGGERS	RRP £29.99
LIBERATION	RRP £34.99
MICROCOSM	RRP £44.99
OSCAR	RRP £29.99
PROJECT X	RRP £12.99
ULT B/BLOWS	RRP £29.99
.TOTAL RRP VALUE:	£462.92



NORMAL RRP ~~£249~~

£199
INC VAT - CCD 3450

FREE DELIVERY IN UK MAINLAND

MORE THAN JUST A GAMES CONSOLE . . .

COMPUTER UPGRADE



Turn the CD32 into a fully functional Amiga 1200 compatible computer.

SX1 MODULE	KEYBOARD	DISK DRIVE
£199	£39	£59
INC VAT - CCA 0100	INC VAT - PKE 0120	INC VAT - DRI 1159

CONNECT TO AN AMIGA COMPUTER
COMMUNICATOR III - NEW MODEL
Allows the CD32 to be connected to all Amiga computer systems - offering AGA graphics to older Amiga models, MIDI ports, genlock functions, Photo CD slideshow (even from PC CDs) and much more. **£79.95** INC VAT - CCA0110

S-PORT SERIAL COMMUNICATIONS
INTERFACE - CD32
Serial network cable for connecting your CD32 to an Amiga computer, allows CD-DATA to be transfered to the computer, supplied with CDPD I CD (600Mb of software). **£29.00** INC VAT - CCA0120

JOYSTICK CONTROLLER
COMPETITION PRO
Control pad for the CD32 allowing you to play both game & audio CDs. Features include auto- & turbo-fire, slow-motion switch & eight-way control. **£14.99** INC VAT - CCA0540

14" STEREO COLOUR MONITOR



Sharpen your output with this high quality 14" RGB & Composite, Stereo Monitor

RRP ~~£293.74~~ **£219** INC VAT
MON 8833 - Requires cable CAB 5224 - £5.95

WATCH MOVIES
With the addition of a simple plug-in cartridge the CD32 can be turned into a fully featured Video CD player. Allows you to play blockbusting movies (full screen) with digital quality picture and sound.
EXPECTED DURING 1995 - CCA 0320 **£199** INC VAT

A COMPLETE RANGE OF SOFTWARE
JUST SOME OF THE 100+ TITLES AVAILABLE ON CD FOR THE AMIGA CD32

Title	Code	Price
Alien Breed - Tower Assault	ARA 5611	£29.99
Arcade Pool	ARA 7681	£14.99
Banshee	ARB 1211	£19.99
Beneath/Steel Sky	ARB 4751	£29.99
Dizzy - The Big Six	ARD 4481	£14.99
Elite 2	ARE 4041	£22.99
Fields of Glory	ARF 3581	£34.99
Guardian	ARG 8781	£29.99
Int Sensible Soccer	ARI 3881	£24.99
Jetstrike	ARJ 3841	£25.99
Jungle Strike	ARJ 7851	£17.99
Litil Divil	ARL 4591	£29.99
PGA European Tour	ARP 3301	£27.99
PhotoCD Lite	ARP 3741	£19.99
Rise Of The Robots	ARR 4641	£34.99
Simon The Sorcerer	ARS 4351	£39.99
Super Stardust	ARS 7831	£29.99
Top Gear 2	ART 5421	£29.99

LATEST TITLES

Title	Price	Code
Exile	£29.99	ARE 9471
Frontier	£29.99	ARF 8241
Kingpin	£14.99	ARK 5491
Lost Eden	£29.99	ARL 6201
Pinball Illusions	£29.99	ARP 4491
Skidmarks 2	£29.99	ARS 5141
Soccer Kid	£14.99	ARS 6571
Speedball 2	£14.99	ARS 6681
Subwars 2050	£29.99	ARS 6901
Theme Park	£34.99	ART 4051
World Cup Golf	£29.99	ARW 7981

THE SILICA SERVICE

SILICA 1978 1995 — 17 YEARS SERVICE TO YOU

Before you decide WHEN to buy, we suggest you consider WHERE to buy and protect your investment with a purchase from Silica. With our unrivalled experience and expertise, we will provide all the extra help, advice and new product information you may need both now and in the future. Visit one of our stores, or return this coupon now and begin to experience the "Silica Service".

NOW IN 18 BRANCHES OF DEBENHAMS STORES NATIONWIDE

- **ESTABLISHED 17 YEARS:** We have a proven track record in professional computer sales.
- **PART OF A £50M A YEAR COMPANY:** With over 300 staff - We are solid and reliable.
- **EXPERIENCED STAFF:** All fully trained in 'Customer Care'.
- **TECHNICAL SUPPORT HELPLINE:** FREE help and advice from a team of experts.
- **A FULL PRODUCT RANGE:** All of your computer requirements from one supplier.
- **WE PRICE MATCH:** We will normally price match any local high street store within a 3 mile radius on a "Same Product - Same Price" basis.
- **FREE CATALOGUES.**
- **PAYMENT:** We accept most major credit cards, cash, cheque or monthly terms (APR 23.8% - written quotes on request).
- **VOLUME DISCOUNTS AVAILABLE:** Business, Education and Government. Tel: 0181-308 0888.
- **MAIL ORDER:** FREE DELIVERY in UK mainland on orders over £40+VAT. Small administration charge (£2.50+VAT) on orders under £40+VAT.
- **21 STORES NATIONWIDE.** *Mini Stores carry a selected range only but products can be ordered in the stores via Mail Order

MAIL ORDER 0181-309 1111
PLUS TECHNICAL AND HEAD OFFICE
SILICA, SILICA HOUSE, HATHERLEY ROAD, SIDCUP, KENT, DA14 4DX
PLUS BRANCHES AT:

BRISTOL	Debenhams - (3rd Floor),	St James Barton	0117-929 1021
* CARDIFF	Debenhams - (1st Floor),	St. David's Way	01222 341576
CHELMSFORD	Debenhams - (2nd Floor),	27 High Street	01245 355511
CROYDON	Debenhams - (2nd Floor),	11-31 North End	0181-688 4455
GLASGOW	Debenhams - (5th Floor),	97 Argyle Street	0141-221 0088
GUILDFORD	Debenhams - (3rd Floor),	Millbrook	01483 301300
HARROW	Debenhams - (2nd Floor),	Station Road	0181-427 4300
HULL	Debenhams - (2nd Floor),	Prospect Street	01482 325151
IPSWICH	Debenhams - (2nd Floor),	Westgate Street	01473 221313
LONDON	Silica	- 52 Tottenham Court Road	0171-580 4000
LONDON	Debenhams - (3rd Floor),	334 Oxford St	0171-580 3000
LUTON	Debenhams - (1st Floor),	Arndale Centre	01582 21201
MANCHESTER	Debenhams - (3rd Floor),	Market Street	0161-832 8666
PLYMOUTH	Debenhams - (3rd Floor),	Royal Parade	01752 266666
ROMFORD	Debenhams - (2nd Floor),	Market Place	01708 766066
SHEFFIELD	Debenhams - (3rd Floor),	The Moor	0114-276 8611
* SHEFFIELD	Debenhams - (L. Ground),	Meadowhall Ctre	0114-256 9779
SIDCUP	Silica	- Silica House, Hatherley Rd	0181-302 8811
SOUTHAMPTON	Debenhams - (1st Floor),	Queensway	01703 223888
SOUTHEND	Keddies	- (2nd Floor), High Street	01702 462426
* THURROCK	Debenhams - (1st Floor),	Lakeside Centre	01708 863587

SILICA

COMPUTER SHOPPER 1994 Awards WINNER *Best Software Delivery Service*

COMPUTER SHOPPER 1994 Awards NOMINATION *Best After Sales Service*

To: Silica, AMCOM-0595-231, Silica House, Hatherley Rd, Sidcup, Kent, DA14 4DX

PLEASE SEND INFORMATION ON AMIGA CD32

Mr/Mrs/Miss/Ms: .... Initials: ....

Surname: ....

Company (if applicable): ....

Address: ....

....

....

.... Postcode: ....

Tel (Home): ....

Tel (Work): ....

Which computer(s), if any, do you own?

.... 231E

E&OE - Advertised prices and specifications may change - Please return the coupon for the latest information.



Moves selector

Just to make our lives easier, I've devised this handy table. Simply find the special move you wish to perform, read the corresponding letter next to it and then look up the joystick move on the table. Easy!

Letter	Manoeuvre
A	Forward, down/forward, down + fire
B	Backward, down/forward, down + fire
C	Down, down/forward, forward + fire
D	Down, down/back, back + fire
E	Down/forward, down, down/back, back + fire
F	Rapid fire
G	Back, forward + fire
H	Down, up + fire
I	Jump, down/back + fire

Name: Slamdunk

Nation: Denmark

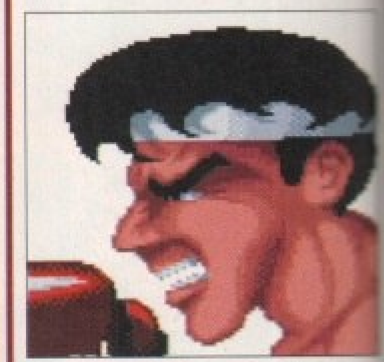
Special moves: Jumping B-ball – C; Spinning fire kick – H; Speed attack – G; Spinning fire B-ball – D; Head spring kick – B



Name: Soria

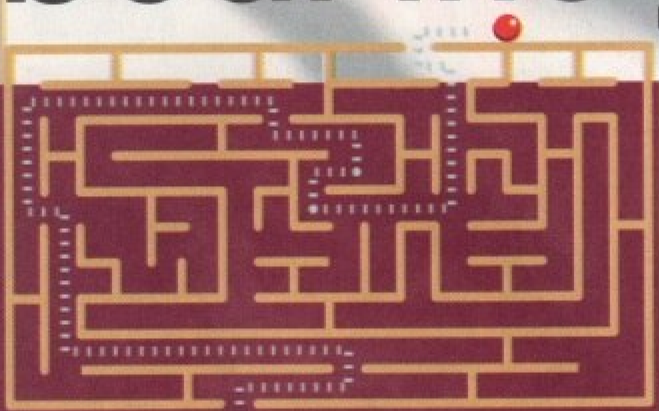
Nation: Belgium

Special moves: Spinning roundhouse – D; Flying kick – G; Double drop kick – J



beat the system

Shad



You are such lucky people. Courtesy of gremlin, we give you a fantastic guide to the various kicks, punches and special manoeuvres contained within this superb, all-conquering beat-'em-up

Name: Fakir

Nation: Pakistan

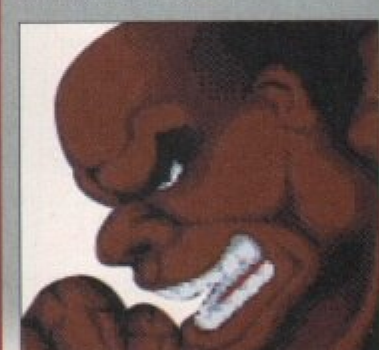
Special moves: Genie hurricane – D; Mystery fire – C; Teleport – E; Magic carpet – A



Name: Kury

Nation: Tibet

Special moves: Power smash fist – D; Body drop – C; Rock roll – G; Spinning fire hand – E

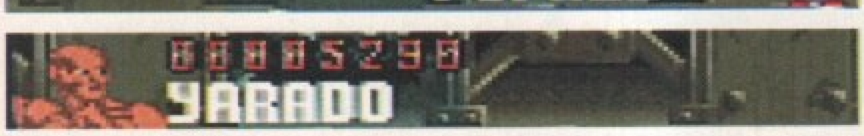


Last resort?

If you're having major problems with Gremlin's superb beat-'em-up, you can do the dirty deed and use these type-in cheats

Cheat	What exactly does it do?
TEREKAKKU	Gives you unlimited credits
PARAPONZIPOPO	Allows you to fight as Puppaz
MBARIVIDISOCCAFFARIMBARI	Allows you to fight as Shadow Fighter
EBBRAVOSECCU	Type in at start of each round and opponents will lose all their energy

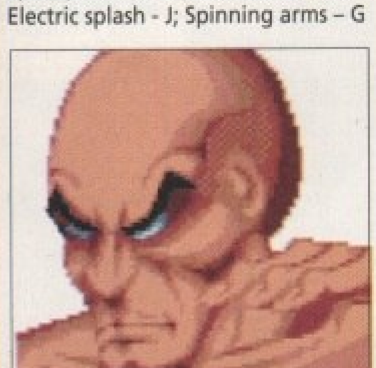




Name: Yarado

Nation: Mexico

Special moves: Electric speed – E; Spirit power – D; Electric body – F; Electric splash - J; Spinning arms – G



Name: Okura

Nation: japan

Special moves: Electric sword – F; Spinning blade – C; Thunder power – J; Steel sword – A; Teleport – A



Name: Electra

Nation: Denmark

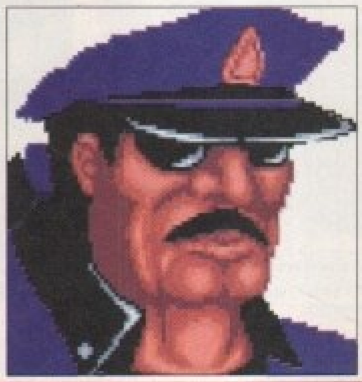
Special moves: Electric body – F; Power launch – C; Earth power energy – E; Electric boomerang – D; Double kick – H; Spinning jump – G



Name: Yurgen

Nation: Germany

Special moves: Gun fire – D; Power fist – C; Earthquake fist – A



Name: Cody

Nation: USA

Special moves: Kuto kick – A; Fast punch – F; Flying power kick – G; Kuto fireball – D



Name: Salvador

Nation: Spain

Special moves: Spinning powerball – C; Turning flip kick – H; Flash panther – G



ow Fighter

Name: Toni

Nation: Italy

Special moves: Burning uppercut - A; Spinning fire – E; Flame kick – B; Massive uppercut – H



Name: Lee Chen

Nation: China

Special moves: Fire hand spring – H; Fist of Falling sun – C; Fire fist – D; Fury kick – F; Falling nunchaku – A



Name: Marx

Nation: Unknown

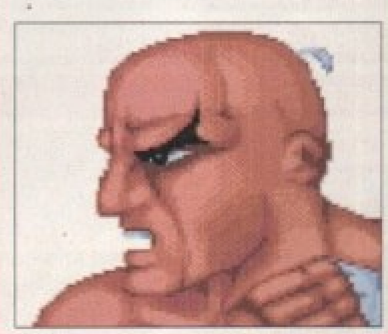
Special moves: Fire hands – A; Cutting claws – C; Rolling claw clash –G; Tiger pounce attack – D; Falling angel – I



Name: Top-Knot

Nation: Thailand

Special moves: Fast fire somersault – D; Spinning kick – A; Power combination – E; Speed elbow smash – G; Hangmans uppercut – H



Name: Toshio

Nation: Japan

Special moves: Fireball – D; Speed dragon – E; Dragon uppercut – H; Dragon kick – C; Circle of fire – A



Name: Khrome

Nation: Unknown

Special moves: Liquid silver attack – D; Melting body – E



Name: Puppaz

Nation: Taiwan

Special applications: Bowling Ball; Buzzing Saw; Electric Fence Force; Flame Thrower; Jack in the Box Punch; Head Bomb



Name: Shadow

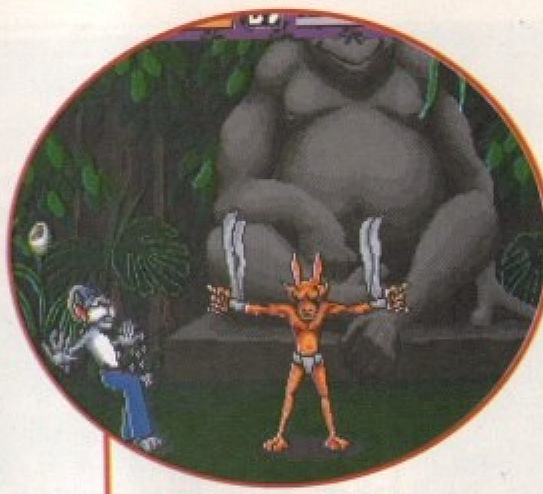
Nation: Unknown

Special Moves: Unknown

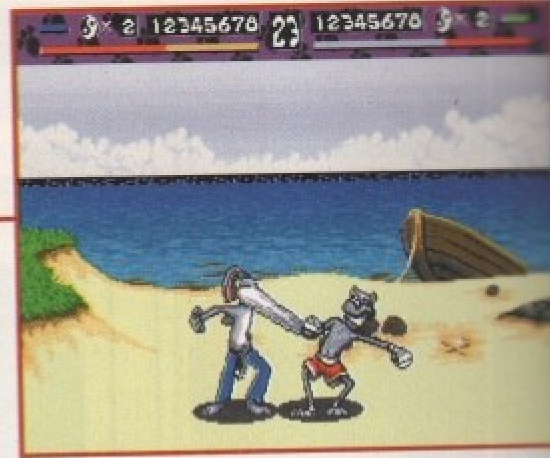




The eight characters will all have a variety of different fighting moves

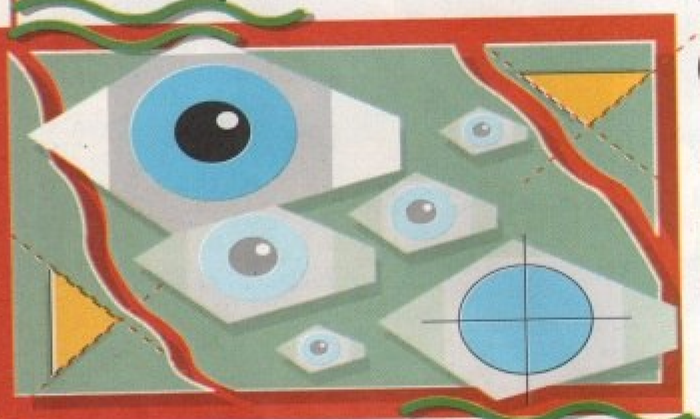


Backdrops look very detailed and there are many different settings



Some of the moves are typical of beat-'em-ups but they still remain in a cartoon style

Brutal Fury



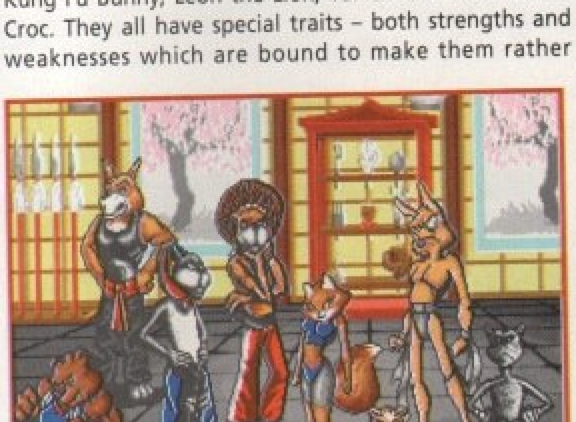
Meet the Frank Bruno of beat-'em-ups, but with a difference. It's Brutal Paws of Fury and it's cuter than fluffy bunny pie. Tina Hackett investigates

So you think all beat-'em-ups are nothing more than gratuitous blood and gore? Do bloodied torsos make your stomach churn? Fear not because Gametek have an alternative you could even invite the Vicar around to play. Called Brutal Paws of Fury, it's still a beat-'em-up, but with a difference. Forget ferocious characters that would rip your head off as soon as they look at you, and clean up the entrails and the headless corpses – there is a new fighting game taking to the ring. Already available on the consoles, Brutal Paws of Fury is almost ready to hit the Amiga and could well steel the hearts of many.

The premise behind it is a little unusual: It's a 'cartoon' martial arts game and certainly promises to be original. There are lots of cute creatures all aiming to beat each other up (in the nicest possible way, of course!) to decide who is worthy of wearing the Belt of Heaven – an award which brings great honour.

This contest is judged by the Dali Llama, who every four years goes on a quest to find the world's greatest warriors. The fighters are all invited to his peaceful island to compete against each other and are judged not only on their martial arts skills but also how much of the 'warrior spirit' they possess. The winner can then claim the coveted Belt of Heaven. Now I say cartoon because, like cartoons, it uses the same comical violence. For example, included in this game is a feature similar to when Jerry hits Tom with a frying pan and stars appear over his head – it's that kind of humour. Other 'cartoonist techniques' will include face pulls, having heads knocked back at obscure angles, and rubber bodies. Cartoon capers replace the normal gratuitous violence and Gametek are hoping the game will help appease the anti-violence lobby who are complaining about the violence in games.

The characters are also cartoon like. There are eight characters in all and each are different animals such as Kung Fu Bunny, Leon the Lion, Tai Cheetah and Karate Croc. They all have special traits – both strengths and weaknesses which are bound to make them rather endearing. As Gametek say: "Players will benefit more from identifying with Kung-Fu Bunny and his quiet wisdom than from the blood-thirsty characters in current 'beat-em-ups' which are a cause of concern to many parents."



Not a drop of blood spilt anywhere! It should appease all those who've been concerned over violent beat-'em-ups

Brutal Paws of Fury will incorporate a clever learning element. Unlike most beat-'em-ups, you are not automatically given all the moves. As you beat two opponents, the Dali Lama reveals a new move. A 30-second countdown then begins and you are shown how to configure your joystick. You then have two tries in which to attempt the move. As in real martial arts, you must try and qualify for higher belts and the more advanced belt you get, the more moves you can do.

There are many different moves for all of the characters and you can play all of the competitors, so the game promises to last. Moves will include some of the typical beat-'em-up ideas such as aerial kicks, but it is still all very cartoon oriented. Combined with these are some very unusual moves. Leo the Lion, for example, is a rock star character who has a guitar move – as he plays his guitar the screen shakes and damages his opponent.

TAUNTING

There will also be a feature called Taunt Moves which has two uses: It will add a nice humorous touch but will also work as a way of replenishing your life meter – so now, even if you only have the tiniest bit of energy left, you can turn away from your opponent, taunt them and boost your energy back a bit, giving you a second chance to win the fight. This is different to other beat-'em-ups where you'd be tempted to give up if you only had a little energy left. An instant replay system will allow you to watch each fight frame by frame, at many different speeds – therefore you can learn from your mistakes or brag about a round well fought. To keep the game competitive there is a tournament system which allows up to eight players to



The nature of the game should still keep the competitive spirit – either against friends or the computer



The cartoon animation promises to provide humour



The characters may look cuddly but they still pack a punch

Paws of

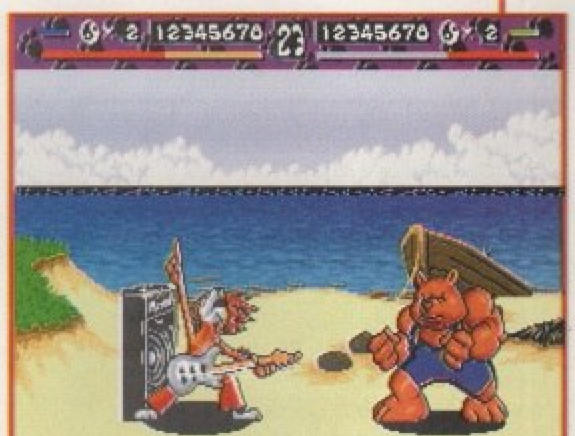
compete in a single tournament or you can play in teams to try and defeat each other.

Level Passwords and a Save game Option will make life easier as well because not only does it store levels but it also remembers belt grade, moves learnt, the number of victories and losses and even the player's name so each password can be individualised.

As you can see from the screenshots, the game is going to be an absolute visual treat. The backdrops are detailed with varied settings, from jungles to beaches. The actual characters look good as well and are cute enough to appear in any cartoon. A great deal of attention to detail will make all the characters charming.

See? No blood, no gore. Brutal Paws of Fury is going to be so squeaky clean you could take it home to meet your parents. Gameplay promise to keep the fundamental excitement of more traditional beat-'em-ups, but gone is the controversial excessive violence so it should have widespread appeal and make this genre more accessible for a wider audience.

Brutal Paws of Fury will be available early in May priced £29.99 for both the disk and CD32 version.



Leo the Lion performs his special guitar move



Brutal Paws of Fury promises to be visually stunning



As you progress you will learn more fight moves

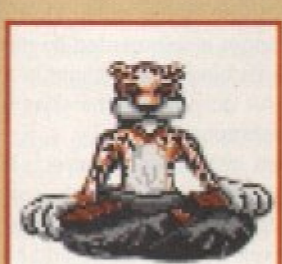
Meet some of the characters



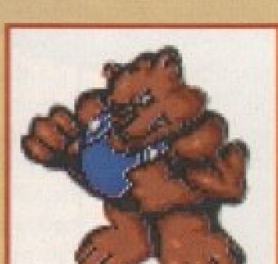
Kung Fu Bunny



Tai Cheetah



Leon the Lion



Ivan Bear

Kung Fu Bunny

Motto: To know fear is courage

A kind and considerate character who gains great pleasure from seeing how he has helped someone succeed

Some moves: Double Flash Kick, Dance of Death

Tai Cheetah

Motto: To teach someone is to be responsible for them

He is devoted to those close to him but cold towards enemies and he lacks the self-motivation to excel

Some moves: Fire Kick, Fire Punch

Leon the Lion

Motto: I have only one judge, the world

Leon never forgets a debt and will always even up the score.

Some moves: Roar, Lightening Fury

Ivan Bear

Motto: You can rest when you're dead

A down-to-earth character who stands for no nonsense and believes any problem can be overcome by a bit of common sense

Some moves: Penjat Silat Mind Throw, Big Belly

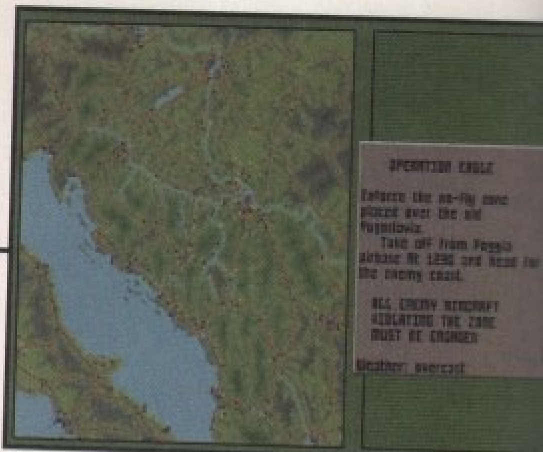
The good old flight sim. A genre almost as old as home computing itself, this type of game always attracted a hardcore fan base. There were, and still are, people who relish the opportunity to immerse themselves in completely authentic flying experiences – people to whom accuracy is more important than appearance.

An equally large number of game players, however, found the whole genre deadly dull. Ground details were bland and unconvincing. There was no sensation of motion, and so-called dogfights often boiled down to electronic combat with specks on the horizon. Then

INTRODUCTION

TFX came along to make the sceptics sit up and think again. Developed originally for the PC, it featured convincing ground terrain, fluffy 3D clouds, satisfying explosions and gorgeous, state-of-the-art airborne technology. In short, here was a sim that looked *exciting*.

Now, Digital Image Design have unveiled TFX for the Amiga. Possibly the most demanding piece of software your machine has ever had to cope with, we test fly the state-of-the-art sim to see if the conversion was worth the wait.



Mission details are given in atmospheric briefing scenes

PLAYABILITY

TFX stands for Tactical Fighter Experiment, a fact which should remind prospective buyers that this is not just a flashy visual feast, but rather a very serious simulation.

There are three hi-tech planes to choose from: The Eurofighter 2000, the Lockheed F-22 or the F-117 Stealth Fighter. Each one handles differently and possesses different armament capacities.

Several varying modes allow for different levels of action and involvement. To start with, the arcade mode is a bit of no-nonsense fun that sets the player off right in the middle of the action. The plain object here is to compete for kills against the clock and work your way up the hi-score board.

In preparation for more serious challenges, ten training missions must be successfully completed. This should give players a good introduction to mastering the navigation and weapon systems.

Once players prove themselves to be up to the job, they can take on the role of pilot flying for the United Nations in a large variety of missions. Alternatively, they may wish to test their skills against all the different flying conditions in the simulator mode.

Combat is realistic yet exciting. You'll find it very difficult, for example, to bring anything down with a chain gun, but tracking MiGs with the right missile isn't too tough.

The copy we had did still have some bugs, most of which were minor. One of the worst was the Chinook helicopters – the models had been imported incorrectly, leaving them distorted in design. DID are aware of these flaws so hopefully they will be swiftly corrected.

TFX is highly configurable, so it's possible to mess with various options during flight. For example, players can alter how strictly the laws of physics are applied to their aircraft.

Similarly, adjustments can be made to the level of G-force effects the pilot will suffer. Set it to maximum and some players will find it too restrictive – any manoeuvre seems to have the pilot blacking out and breathing heavily.



Taking a sideways look at the night-life before I get down to serious business



Action at the break of dawn: The F22 swoops over a city



It's not all fun in the sun – TFX features a whole range of climates, including this all too familiar gloom



The F22 evading incoming missiles – remembering to lift the undercarriage would have helped

SOUPED-UP SIM

Having read how demanding TFX is as a piece of software, you may be wondering what the minimum amount of kit is to get it running properly.

The bottom line is that it can be played on a basic A1200 – just about – but you will have to turn down the detail to its minimum setting, which means missing out on some of the finer touches. Having said that, it still looks better than the opposition in most respects.

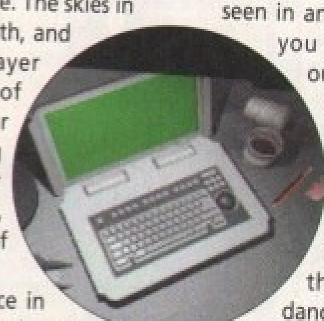
If you've got an accelerator things start to get more impressive, and the more fast RAM available the better. There's also an FPU version, so if you're lucky enough to have an accelerator fitted with a maths co-processor you should be set up for a pretty stunning experience.

Whatever your machine's specifications are, however, one thing must be stressed if you want to enjoy playing the game: It needs an analogue joystick. While there is an option to use a digital joystick or keyboard, this seriously undermines the smoothness of control, especially when flying the planes at high speed. For whatever reason, the digital controllers can't keep up with the graphics.

GRAPHICS

Forget the empty, flat landscapes and the basic block-like shapes used by some flight sims to represent enemy units, TFX was designed to inspire and awe, and the words 'if looks could kill' have never seemed so apt.

From the moment the player starts the engines up, there are significant differences between the look of this game and the standard sim fare. The skies in TFX have space and depth, and once airborne, the player has a panoramic view of patchwork fields or detailed cities passing beneath them. It is a far cry from the blue sky, yellow desert simplicity of some flying games.



Missions can take place in a range of conditions including day, night and dawn flights, and players may encounter cloud cover or even storm weather accompanied by sheet lightning.

The visual realism gives each mission a different flavour. Night-time bombing doesn't just mean flying with a blacked-out screen – the sky in TFX has a faint, gradiated luminescence, while on the ground, cities are represented by convincing clusters of light.

Cross over enemy gun installations and the air is filled by streams of rising light as tracer bullets track onto your aircraft. At times it can be breathtakingly atmospheric.

Stormy conditions are gloomy and grey, with the most convincing clouds seen in any game I've played yet. As you pass into them the view outside the window gradually mists before becoming completely obscured.

Explosions, special effects and fancy camera views are offered as a satisfying reward for honing those flying skills. Physical danger is represented by more than a flashing warning light in the cockpit, as AA guns pump the skies full of clouds of shrapnel.

It may not be politically correct, but the kill is what a game like this is ultimately about. It's rewarding, therefore, that explosions are impressive and that it's easy to view any victim going down. Players can launch missiles and watch them streak off leaving a trail behind,

TFX

It's the flight sim Amiga owners have been waiting for, but is the excitement justified? Gareth Lofthouse locks on target



Attacking ships with the cannon is not very sensible

Publisher: Ocean
Developers: DID
Disks: 6
Price: £39.99
Genre:Flight Sim
HD install: Yes
Control System: Joystick
Supports: A1200,A4000
Recommended: 68020, Analogue joystick



then they can change to the missile's view to watch it close in on the enemy.

When it comes to different views in general, TFX is better equipped than any rival as far as impressing your mates is concerned. One mode allows you to look in any direction from the cockpit (as opposed to the usual left, right and behind view), but the best is the fly-by shot which brings your fighter swooping impressively towards the camera.

Cockpit detail is high, with all necessary indicators being visible from the normal cockpit view. There are three screens on which a huge range of information displays can be selected, so the purists should feel well catered for.

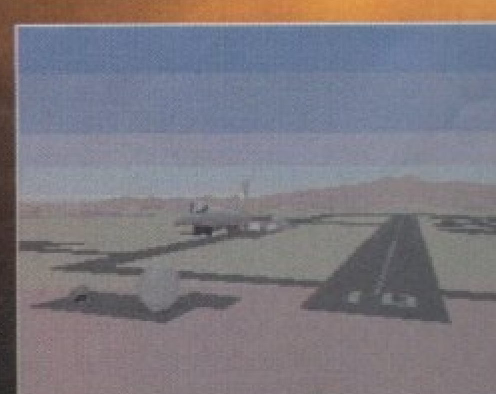
The important thing to realise, unfortunately, is that TFX can only be seen in its full glory if played on a fast, powerful machine, because basic A1200 users will find the screen update too slow with the game detail turned up high.

Most players will probably be able to play TFX with medium detail. This means going without a few frills, such as emblems on a fighter's tailwing, but on the whole TFX still looks highly impressive.

93%



You get your very own Stealth bomber to snoop about in after sun-down



Desert strike: The Eurofighter 2000 takes off in the Lebanon

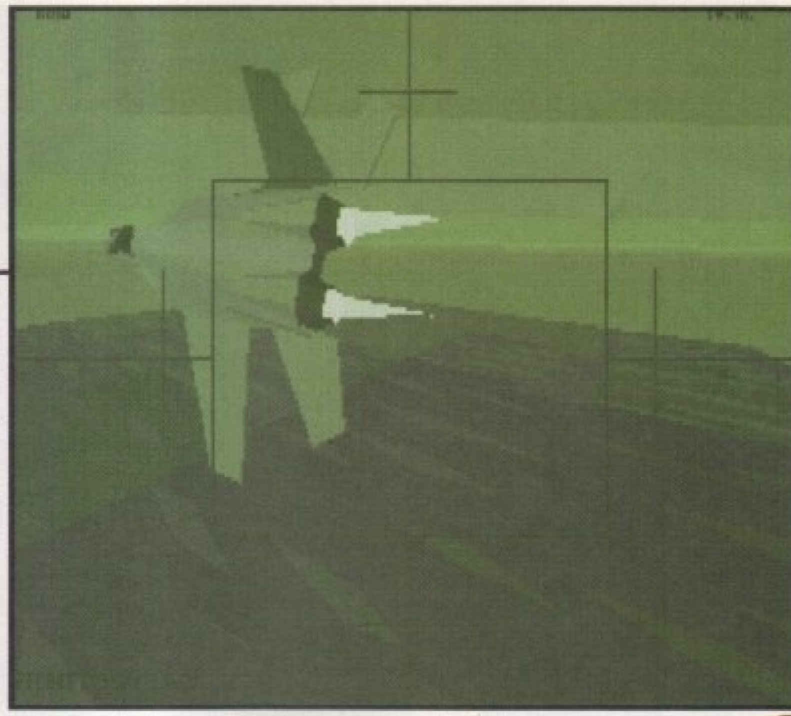
FLASHBACK

For a long time, Microprose were the developers the sim fanatics put their faith in. One of the first game makers to introduce combat missions into the genre, their product's playability was always strong, even when the graphics were rather dull.

Featuring a stealth bomber as one of its planes, TFX bears comparison with Microprose's F117-A. Accuracy levels seem to be pretty much the same, but when it comes to the graphics department the Microprose game is old, and it looks it.

The closest rival technically to TFX has got to be Tornado. Featuring some stunning graphics, unprecedented accuracy and involving campaigns, It remains a very impressive game.

TFX surpasses its predecessor in most respects, however, simply because it combines even more detailed graphics while making improvements on the running speed. In short, DID have produced the best Amiga sim ever.



An enemy about to bite the bullet as my missile locks in for the kill

Try before you buy

As has been mentioned elsewhere in the review, minor bugs cropped up here and there, but generally they were no great cause for concern.

More worrying is the fact that our copy of TFX did not seem stable running on a basic A1200, thanks to regular crashing in the middle of a game. DID are aware of the problems and have made assurances that any problems will be resolved before the product hits the streets. The cautious among you, however, may like to see it up and running before you splash any cash.





Missions are given more authenticity with a few extra details such as news reports



Another humiliating meeting with a typically sour-faced colonel - I must stop trashing planes



'Take on the missions – fight for peace.' Flying for the UN gives TFX a small twist on the usual SIM theme

SOUND

Let's start with the bad point – the music. Imagine you've just bought the ultimate flight simulator boasting an unprecedented level of realism and excitement, and you're looking with anticipation at the introductory screens in preparation for the experience of Tactical Fighter Experiment.

In come the martial drum sounds sim games use to get you keyed up for the mission. So far so good, but as you prepare to arm your fighter with the latest deadly hardware, things on the music front start to go ludicrously wrong. Enter the noodling tinny noise of a theme played on a 1983 Casio.

Not that this matters one iota, but it made me laugh. Otherwise, the game's audio is proficiently handled, with plenty of varied effects to flesh out the atmosphere for the game.

A number of voices pipe up with information for the pilot during the game, including the girl with the home counties accent at take-off ("engines on!") and the redneck yank who, when you shoot a plane down, tastefully jeers "toasted bogey!"

Bay doors, the brakes and landing gears all make a satisfying hydraulic groan when activated – small touches maybe, but ones which make the game that bit more convincing.

84%

OPINION

90%

TFX was originally designed with the fastest, megabuck PCs in mind, so there were understandable doubts as to whether a conversion was worthwhile for the much cheaper, and in some respects less powerful A1200.

So now that it's finally here, what's the verdict?

DID have pushed the Amiga to the limit in an attempt to bring us the best flight sim ever. They have undoubtedly done an excellent job, but whether or not TFX is for you will depend on a number of factors. Firstly, the basic A1200 cannot show the game off at anywhere near its best – a point worth considering if you're only interested in those gorgeous graphics. Even so, with minimum detail it still looks good and the real sim fan will find plenty of depth and accuracy in the actual gameplay to occupy many an early morning.

The more powerful your Amiga is, however, the more impressive TFX becomes, and at its best it really can be quite stunning. With a suitably accelerated machine, this game has the visual flair and excitement to attract fans usually put off by the Sim-designers' fetish for complexity.

It's a shame that only the select few will be able to play the game in its best form, but DID can't be blamed for pushing the Amiga's capabilities to the limit. An outstanding sim in its own rights, there's a lot to recommend it to owners of lower-powered machines.

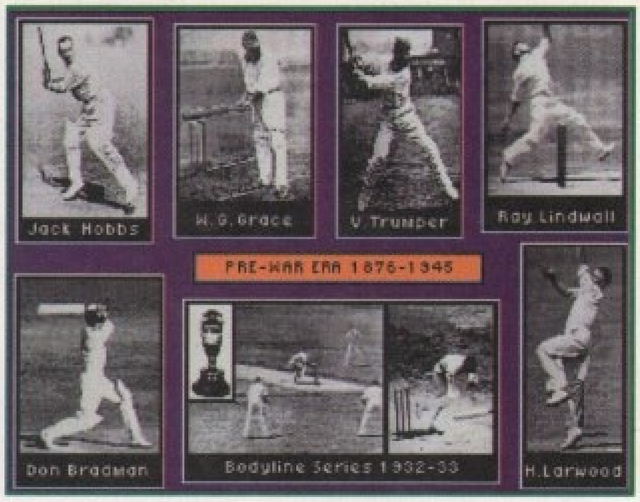
Problems aside, this game beats its closest rival both in detail and in speed. TFX is the best sim on the Amiga of all time, and that's a fact unlikely to change in a long, long time

INTRODUCTION

The game of cricket – what could be nicer on a warm summer's afternoon than pottering along to the local pavilion to watch the village team or maybe even partaking in a game yourself?

It's a nice image, but being in good old England we don't get many warm summer's afternoons so what better way to enjoy the sport than from the comfort of your armchair in front of the monitor.

This in mind, it is perhaps rather surprising that there haven't been many computer cricket games. In fact the only good one that springs to mind is Audiogenic's Graham Gouch. But this could all be set to change. Team 17 are working on their more arcadey Final Over cricket game and now we also have Grandslam's latest contribution. But will it really bowl you over?



The memorabilia in the introduction is a nice touch and will appeal to all true cricket fans

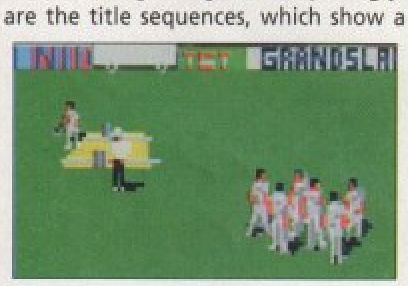
It's Cricket

Aah, the crack of leather on willow. No, it's not the latest scandal involving a Tory minister. It's Cricket – literally. Tina Hackett is your umpire

GRAPHICS

I must say I was slightly confused by the graphics for It's Cricket – I mean, when I saw the batting or bowling screens I was impressed. They are nicely set out, the sprites are large and well-animated and the stadium is detailed. But (and this is a big but) when the fielding screen came up it looked absolutely abysmal. The sprites are tiny and very basic and took me back to graphics from about ten years ago! It just looked very strange – like two different games.

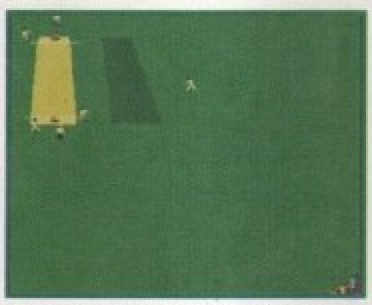
At the beginning, not surprisingly, are the title sequences, which show a

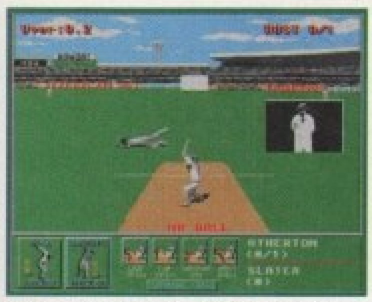


selection of digitised pictures containing cricket memorabilia. This is a very nice touch that cricket fans are bound to love. The pictures are used throughout the game to select your players and they give the game a more human touch rather than having to choose from a lot of facts and figures. You can also put in your own images by using a paint package.

The different animated sequences that appear throughout the game work well, such as Umpire decisions, and there's even a rather strange but realistic animation of a duck for, you guessed it, no runs scored.

60%


The fielding part of the game is far too random and very fiddly


There are a nice range of animations and the digitised pictures work well

Publisher: Grandslam
Developer: Nightowl Software
Disks: 3
Price: £28.99
Genre: Sports
Hard Disk Install: Yes
Control System: Mouse/Joystick
Supports: All Amigas (1Mb min)
Recommended: 68000 upwards

SOUND

The introduction for the game is a loud dancey tune, but what is really impressive on the sonics front though is the speech samples. These have been taken from match commentary so you get things like "It's in the air" or "He's out." and these phrases fit in with the action and give an authentic feel. The crowd effects work well too with cheers, boos and the like going off when appropriate, all helping to create a good international cricket atmosphere.

70%

OPINION 42%

Overall this game just didn't work in the playability stakes. The bowling aspect is okay, as is the batting, but the fielding is absolutely dreadful. Once the batsman has hit the ball you then get an overhead view of the rest of the field. If you're on the bowling side you have to pick a fielder, move him to where the ball is probably going to land and then he will throw the ball back. This is very fiddly and tedious and it's more a case of guesswork than actual skill.

The bowling isn't too bad – you get to pick whether you want to bowl the ball around or over the wicket and then you can choose whether you want spin or not. Pace or spin bowling is determined by the player's attribute in the Player's Profile. This works well enough but after a while would become rather repetitive. The batting part is quite nice though – once you've remembered which controls do what. There are 12 moves available and you press the joystick once, twice or three times followed by up, down, left or right depending on the shot you want. This method allows for some really nice moves to be executed.

The game has its good points, such as having plenty of player stats which should go down well with the real cricket buffs, and it is also expandable for future add-ons. However, despite some nice graphics, a great cricketing atmosphere and some cleverly-used speech samples, the fielding aspect lets the whole thing down. A shame.

FREE!

MULTIMEDIA CD-ROM

NO PURCHASE NECESSARY

FOR ANY AMIGA

To celebrate our 2nd successful year in business we're giving away **10,000** free Multimedia CD-ROM disks.

EPIC Software

MULTIMEDIA MANIA CD-ROM

Includes
500 top quality fonts,
1500 of the best clipart images,
200 music modules,
500 instruments,
over 200 soundfx,
100 Video backdrops,
200 textures,
200 3D objects,
100 AGA images,
200 colour clip fonts,
Animations,
graphics tools and lots more

ORDER CODE: CDMMM60

WORTH £19.99

01793 422355

LINES OPEN 6 DAYS A WEEK 9.30AM - 5.30PM

There is a non-refundable £6.00 shipping and admin charge to residents in the UK and £9.00 P&P for foreign orders. Please have your credit card ready. Access, Visa, Mastercard & Eurocard accepted. Fax your order on 01793 514187. Send cheques to : Epic Marketing, PO Box 637, Swindon SN1 3DN. Offer limited to the first 10,000 customers, and only one CD per customer applies. If you wish to collect, you can exchange this advert for your free CD from Epic in Swindon. This offer is run separate from any other offer we are currently running. An up to date CD-ROM list will be sent with your free CD. Please allow 14 days for delivery E&OE

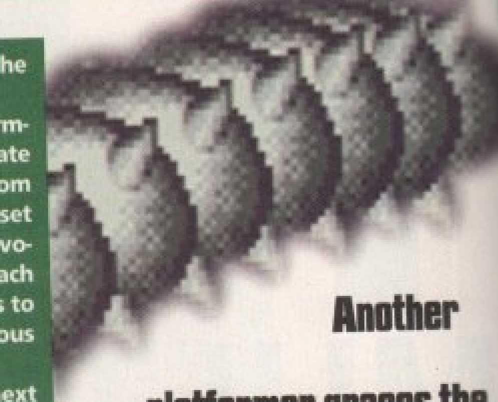
INTRODUCTION

Platformers are regular cannon fodder in the laser-mounted sights of cynical reviewers. Constant complaints of the genre being dead and ready for burial are levelled at the software houses – yet the platform phenomena keeps rolling onwards.

This particular reviewer doesn't actually have a problem with a game style that has been round for the last 14 years or so as long as it's done well. Take a look at Flashback on the Amiga or Donkey Kong Country on the SNES and it's obvious there's still life in the genre yet – it just takes a little time, imagination and a fresh pair of eyes to see the possibilities of increasing the genre's potential.

Enter Ruffian then, the latest recruit to the platforming ranks. Set in a jungle, you take on the unfortunate role of Ruffian, a cross between Tarzan, Mowgli from the Jungle Book and Sid the Sexist. The mission is to set free a certain amount of pixies caught up in carnivorous plants dotted over the scrolling landscape of each level. The player achieves this by spitting plant seeds to liberate the little fellas and also take out the various creatures that festoon the climbable vegetation.

Once done, race to the exit to move onto the next level. Dotted all over the place are jewels, gold cups, potions and spells that can be used to progress further into the game. And that's pretty much it.



Another platformer graces the Amiga. Adam Phillips goes into the jungle to find out if it's any good or simply another lethargic run 'n' jump effort

Ruffian



GRAPHICS

While effective, Ruffian's visual presentation is of a decidedly average quality. The main character, Ruffian, while 'packed with character', is not exactly the most satisfying of sprites to see leaping from platform to platform. Like all jump-'em-ups these days, he too has his own little routines when left standing still for too long – the most memorable one being a full-on moonie.

The other creatures that infest the forest are again average, with not much in the way of character. The gorillas are especially badly drawn and walk round as if they have a corn cob stuck in a particularly sensitive orifice. Another annoyance is that some of the platforms and enemies can sometimes blend all too easily in to the background. While adding to the challenge, it can also lay on the frustration in large thick wads as you fall for the fourth time down a level and have to work your way round again.

While the multi-directional scrolling is of a high quality, the lack of any parallax scrolling and the PD-ish look of the whole game really doesn't make one ache to get further into it on a search for graphical delights, but just to turn the computer off.

40%

SOUND

The various effects that make up the atmospheric soundtrack of Ruffian are probably the game's strongest area. The jungle noise of crickets clicking in the background is complimented by the screeches and calls of unseen animals. While it's all rather clichéd, it works well.

The most novel and perhaps gross sound effect is the guttural noises of Ruffian as he fires a healthful glob of flem-covered, bullet-like seeds at anything that moves. Charming...

45%



Leap and dash through the multi scrolling levels in the search of pixies



On finding the little suckers, spit a seed to free them from captivity



One of the end-of-level-style bosses that must be destroyed to reach previously inaccessible areas

- Publisher: Grand Slam
- Developer: After Dark
- Disks: 3
- Price: TBA
- Genre: Platformer
- Hard Disk Installable: No
- Control: Joystick
- Supports: A500/600/1200
- Recommended: 6800 upwards

OPINION 40%

At first, it's easy to pass this game off without so much as a second glance. Unfortunately, for the reviewer, on second, third, fourth and fifth intense gazes at the screen, it doesn't really get any better. Ruffian can be best described as a game that uncomfortably lands somewhere between PD and a fully-fledged commercial release.

On its good side, there are a couple of novel elements. Firstly there's the spitting of seeds which requires aiming Ruffian's head with the left and right keys and then releasing the fire button to send the seed hurtling on its way to its destination. Then, having to shoot the pixies to release them can involve bouncing said seeds off walls to reach them – a nice idea.

The game tries to imitate instead of establish its own platforming identity. On your travels, power-ups are available which increase firepower, make your jumps higher and give other intially tempting bonuses such as a magic carpet. End-of-level-like bosses have to be destroyed to reach particular points but unfortunately, all these usually enticing elements, which probably sounded good on paper, seem rather half-hearted and simply fail to capture the adrenaline or imagination of the player.

The game is certainly a challenge with its time limits and tough goings on through the large areas of each level, but the whole experience leaves you with an empty feeling of having seen and done this all before. Not a platformer I can recommend, unfortunately – perhaps those cynical reviewers were right after all.

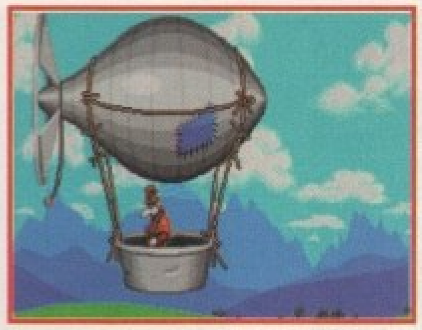
INTRODUCTION

Amiga platformers have always been rather hit and miss when it comes to quality in comparison to their console counterparts. People have said good things about games like Zool or Superfrog, but good as they were, I found them to be pale reflections of the best Sega and Nintendo rivals.

Now this jaded genre has a newcomer designed by Flair Software. Featuring a rabbit remarkably similar to the one in Disney's Alice in Wonderland, Whizz is slightly unusual in that it's an isometric adventure – in other words, a platformer in 3D.

The story behind Whizz is simple, you'll be surprised to hear. Our rapidly rotating rabbit is being chased by his adversary Ratty in a balloon around the mystical world, leading to adventures set on levels like the Green Grassed Castle or the South Sea Beaches.

Disembarking from his aerial transport, Whizz sets off on each level in a race against time, frantically seeking a variety of collectables needed to complete his mission. If the sands of time run out before he succeeds, however, Ratty will catch him up and finish him off.



Whizz has to race through each land, because his arch enemy is always in pursuit



The beginning sets the tone with Lewis Carroll-style visuals

Whizz

Flair Software are back hoping their latest game will inject some new life into the platform genre. Gareth Lofthouse takes Whizz for a whirl



- Publisher: Flair Software
- Developer: Flair Software
- Disks: 2
- Price: £25.99
- Genre: Platform
- Hard Disk Install: Why bother
- Control: Joystick
- Supports: A1200
- Recommended: 68020

SOUND

Sadly this game's soundtrack is more likely to irritate than give Whizz appeal. It's the sort of sonic sewage we've been listening to on computer games since the mid-'80s, and frankly I'd rather play with the sound turned off than suffer it all over again.

If old ideas are going to get rehashed, developers should at least attempt to perfect them. To me, the humdrum nature of the sound effects in Whizz give it away as a half-hearted affair.



Our rabbit spins to shatter the ice door

GRAPHICS

Whirl is hardly going to turn heads as far as its looks go, but it's not too bad. The isometric view is an unusual touch in this type of game, the main character is likeable enough, and the general effect is cheerfully colourful.

Details have been added to give Whizz a dream-like appearance. For example, the first level appears to be set high up in the sky, with the ocean visible miles below the action. Then there's the Indoor World of Gamesville, a bizarre land of puzzles featuring giant cards that again would look perfectly at home in a Lewis Carroll adventure. Unfortunately there are a fair few drawbacks as well. The monsters are at best unimpressive and at worst ineptly designed – the bouncing tubes, for example, shouldn't really have made it off the drawing board.

There are various features to visually reward the player. Hopping onto some buttons will launch bonus scoring rockets, doors shatter when approached using the correct device, and as in the Nintendo Mario series, there are power-up mushrooms to be consumed. Why these platform programmers are fixated by magic mushrooms I couldn't say.

54%

OPINION **40%**

Okay, I'm a bit tired of platformers, so the likelihood of me being stunned into silent awe by Whizz was rather unlikely. Nevertheless, I was hoping for some entertaining puzzles and a few fresh twists on an old idea.

Whizz does feature the odd interesting innovation, but unfortunately they are not successfully pulled off. Take the isometric view, for example. This device has worked well in a lot of games since Knightlore on the Spectrum, but try to zip round in Whizz and things get frustrating. The problem is that Whizz is about a race against time, and the traditional Sonic Hedgehog view seems better suited to that sort of challenge.

The way players are supposed to spin the rabbit into enemies to kill them is another example of either a singular lack of imagination or effort on the developer's part. Added to that is the fact that it's tough from the outset and you have to go right back to the level's beginning – factors which won't help to win new friends for the genre.

For those who've had enough of the usual platform fare to last a lifetime, my advice is to give Whizz a wide berth. Then again, my advice for those who do like the genre is to give it a miss in the hope that something half professional might come along.

INTRODUCTION

New Zealand company, Acid Software, are really building a reputation for top-quality software at the moment. Just a few months ago they released the superb Guardian, a 3D isometric shoot-'em-up, then followed Roadkill, a stunning overhead racer.

This time they are once again concentrating their efforts on another racer – one that has a hard act to follow if it wants to live up to the reputation of its predecessor. Yes, it's the sequel to their highly acclaimed race-'em-up, Skidmarks and has many new features. There are new cars, caravan towing and new tracks a-plenty, but with all the current racers around can it still stand up to the competition?



Yes, it's cows towing caravans – you can see why they're called Acid Software



And we're off – get ready to burn rubber. Oh no, boy racer mode setting in again



All the different backdrops look good and are varied

FLASHBACK

Fun race-'em-ups are undergoing a bit of a revival of late. We've had Team 17's ATR which scored a healthy 89 per cent, and was packed with playability thanks to being able to win money to soup up your car. ATR also had some very nice looking, varied tracks with tunnels and oil slicks on the road, and although there were only three cars they all handled significantly different. However, in Skidmarks 2 it actually feels more competitive and the rough and tumble approach works well as you all scramble to the finish.

Skidmarks 2 will also have to watch its back from the new competition, Arcane's racer Turbo Trax, which also looks very promising.

Another fun racer that springs to mind is Micro Machines – the tabletop matchbox car game that had you racing around school desks and kitchen tables. Although Skidmarks 2 is set in 'proper' surroundings, it does remind me of Micro machines in it's chaotic, fun and cutesy approach.

This time round, Skids' 2 has a lot of advantages over its rivals with its many options, multi-player features and many screen modes. It also has millions of cars to choose from – where else can you race cows towing caravans?!



There are some very windy tracks and you'll have to think about where you're going

Super

- Publisher: Guildhall
- Developer: Acid Software
- Disks: 7
- Price: £29.99
- Genre: Racer
- Hard disk install: Yes
- Control system: Joystick/Keyboard
- Supports: All Amigas (1Mb+)
- Recommended: 68000 upwards



The cars look robust and as though they will stand up to the rough and tumble gameplay

GRAPHICS

The original Skidmarks was never the most graphically high-tech of racing games but was definitely one of the most appealing. It gave the genre a whole new slant with a real fun, almost cute, look to it with its miniature matchbox-type cars. Skidmarks 2 has kept this same approach and made it even better.

As stated before, there are the vehicles from the original plus others, including the option to race some cows and tow caravans! This all looks terrific and adds a very humorous touch. The different cars are all fantastic, from the VWs to the Midget, and there is even the option to change their colours from the blues and greens to a fluorescent tone.

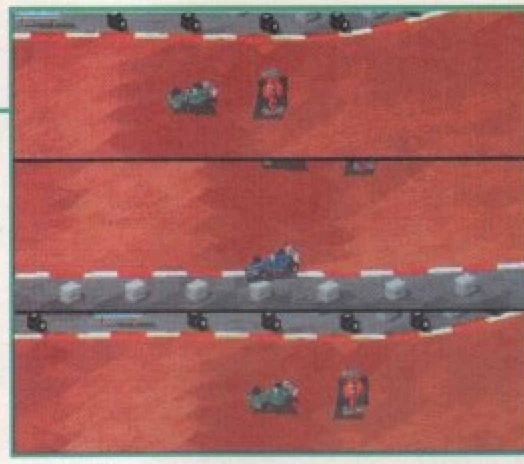
There are many more tracks included this time with a variety of different settings. There's an icy terrain, a desert, and a Grand Prix circuit among others, and each works really well with bright colourful backdrops and plenty of detail. Miniature spectators fit in with the cute style, and other additions such as signs and advertising hoardings look good.

A lot of the graphics have been designed with the gameplay in mind, for example, textured tracks and ramps have been included to provide a more challenging race, but they also look good – especially when the cars leap up into the air over the bumps!

75%



Okay, last again I know. It wasn't my fault, it's the joystick, err, I wasn't ready, they've cheated etc.



Triple-screen mode and it's time to grab some friends for a mad dash around the track



Some of the tracks have bumps or ramps to provide variety

Skidmarks 2

Tina Hackett dons her helmet and leathers and gears up to review the sequel to Skidmarks. Damon Hill eat you heart out!





There's a quick round of Pong to keep you occupied while the game loads – but the interface isn't exactly user-friendly

PLAYABILITY

Playability is what Super Skidmarks is all about. It's a pure race-'em-up, there's no doubt about that, and whereas other racing games penalise you for bumping into other cars, this one actively encourages it! You burn off from the starting line in true 'boy racer' style, nudge other cars into the barriers, skilfully steer around the bends and negotiate the ramps. And what great fun it is too!

Unfortunately, there isn't a feature where you can collect bonuses or win money to upgrade your car which would have provided more longevity to the one-player games. However, the Championship mode does compensate in some way as it provides some kind of long-term objective and gives more of a purpose to the proceedings.

Where the game really shines, though, is through the multi-player mode. Extra players can make use of Keyboard controls or the joystick adaptor and it's definitely worthwhile dragging a few friends into the proceedings to experience all the thrills and spills.

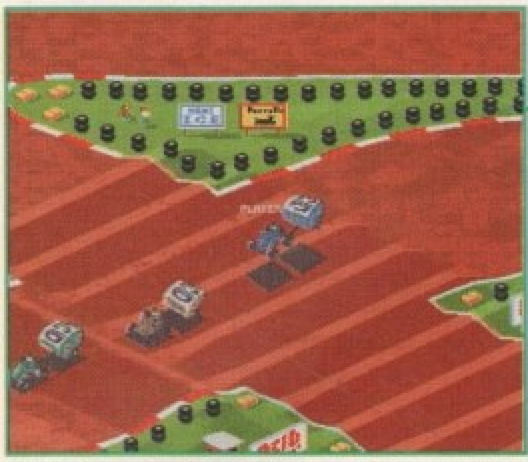
There are plenty of different tracks available now to test even the most experienced racer. Twelve new ones have been included, plus the game is compatible with the original 12. Each has a variety of challenges from the simple figure of eight tracks to complex, windy courses with hairpin bends and ramps or bumps you will need to leap over in true rally style. A lot of the tracks have arrows showing you where to go but it still takes a lot of practice to learn where you are going, how to master the corners and the like.

Control of the game is either via the keyboard or the joystick. The accelerator on the joystick is implemented by pushing forward or by pressing fire, and the keyboard controls are either through the arrow or control keys. Both work equally well and a lot is down to which you think is easier.

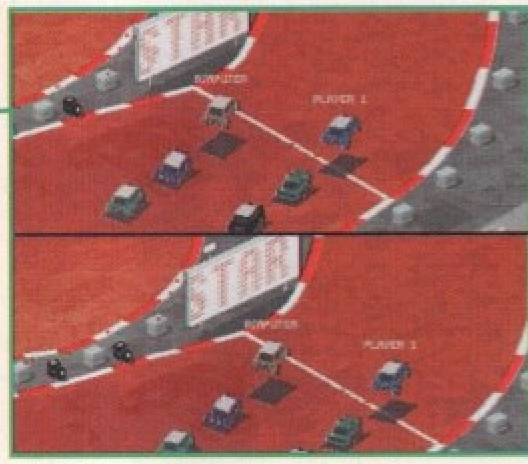
Skids 2 caters for both the experts and those new to the game because you can change how the car handles. For example, as well as the usual Classic you can choose Slippery which makes the car totally difficult to handle, or Pedal Car which gives you a chance to practice – and if you haven't played it before you're going to need it!

The trick is to treat the vehicles like Rally cars and try to slide them round the tracks rather than steer them around. And it's recommended you don't take your finger off the accelerator button!

Oh and while you wait for the disks to load you can have a game of Pong – a nice, novel touch that saves you sitting around doing nothing.



Ouch! Caravan towing over the bumps!



The different screen modes are a great idea



The dinky spectators fit in with the fun feel of the game

OPTIONAL EXTRAS

Super Skidmarks 2 has plenty of extra features this time, including the ability to customise your own vehicles. By using Imagine 2 you can render your cars and add them to the game.

Acid Software are going to be releasing their SkidMarks Racer magazine for fans of the game which will inform players of new tracks and upgrades. It will also run competitions such as designing trackside details and a car modelling competition. A GrandPrix registration section will let readers contact each other to organise race meetings and through a BBS, schedule playoffs. The game is hard disk installable but Acid feel that because of Piracy problems they have not yet made the track disks installable. However, they are hoping that with the first issue of their magazine they will be including a Track Disk Install utility.

The multi-player aspect of the game is brilliant and the game supports four joystick adapters which connect two extra joysticks via the parallel port – the manual even contains instructions on how to build such a device.

Skidmarks 2 also has improved comms support for local and remote linking, so if you have a Modem you can link to other players and race over the phone lines.

Another nice addition is the different screen modes available. There's Hi (on an AGA machine) and Lo-res (low gives you a large, closer view of the cars) or if two or three players are taking part then the screen splits either two or three ways. A Shared screen mode is also available for four-player team racing.

AGA owners can also race up to eight cars at once and if your machine has more than 1Mb of memory, you will be able to race more than one type of car in one race and listen to the option screen music. Talking of sound, it is also possible to replace audio samples in the sfx drawer with your own.

SOUND

The game starts with a loud rock tune which gets you in the mood for some serious racing. It's not the kind of tune you'd like to sit and listen to but it does fit in with the feel of the game.

In the actual game itself you do get some very good authentic racing noises. You are given a countdown bleep before each race, your engine roars into life, there's a clash of bumpers as the cars fight for pole position and tyres screech as you spin around the next bend. This all conjures up the competitive racing spirit in you and has you tearing round the circuits like a thing possessed.

A quirky addition is the horn – you can activate this by pulling back on the joystick or left and right keys together. This is great when you are right behind someone and you can let rip with the horn before sneakily overtaking them on the inside.

Music kicks in again on the options screens and it's adequate enough and fits in, but as I say, you won't want to listen to it for long.

70%



Those with more memory will be able to race different cars against each other

OPINION

89%

This is one hell of a race-'em-up it has to be said. Okay, so it just relies on the racing part and has no bonuses or upgrades to strive for, but it's great fun, especially when you have two or more players. It works really well in bringing out the competitive edge in you and with all the different tracks it provides a challenge. The many different championships add variety too.

The extra cars you get this time round are a great aspect. Some are just there for novelty value, such as the cows, but with a light-hearted game such as this it comes across really well. The VWs and Minis look good too – they're cute and fanatics of these vehicles will love having the opportunity to race around in their favourite cars.

Caravan towing is more than just a novelty too because it is very tricky trying to race around the tracks with these cumbersome vehicles strapped to the back.

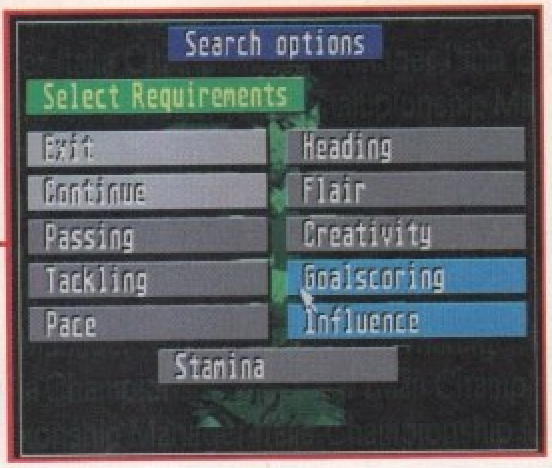
Graphics are not particularly advanced but they look colourful and fun, which definitely fits in with the feel of the game. The options screens could do with some work on them though – they didn't look particularly good and were fiddly to operate. It didn't look exactly polished and I would like to have seen something more user-friendly and a bit more attractive to look at. There were a few minor glitches and bugs along the way but I can't say they happened all that often or were particularly noticeable – they certainly don't detract from what is a thoroughly enjoyable game.

AMIGA GOLD AWARD

This is one of the most playable and fun race-'em-ups around and with the vast amount of new features added it's certainly worth a look, even if you have the original.

INTRODUCTION

Domark's Championship Manager was highly acclaimed by both the press and public alike and now it's been re-released to contain one of the most exciting leagues in the world – Italy. Championship Manager Italia '95 has full details on players in Serie A and Serie B and contains all the major domestic and European competitions.



Select your requirements for a new player

- **Publisher:** Domark
- **Developer:** Intelek
- **Disks:** 1 (2 blank needed)
- **Price:** £24.99
- **Genre:** Sports/management
- **Hard disk install:** Yes
- **Control:** Mouse
- **Supports:** All Amigas (1Mb+)
- **Recommended:** 68000 upwards

Championship Manager Italia '95

Italy – pasta, ice-cream, the Leaning Tower of Pisa. Oh yeah and football, exciting football! Domark have taken their Championship Management game and given it an Italian flavour. Tina Hackett has a taste of the action

GRAPHICS



Graphics are mainly table-based, so it is essential these are clearly set-out. Fortunately, Championship Manager has always been nicely presented with plenty of bright, colourful screens and an easy-to-access icon system. There's a background screen, showing a footballer, which can be changed, along with the background colour – it's really just a novelty aspect but does add some variety. The match is viewed with a series of bars showing the performance of each team's defence, midfield and attack, and gives a running commentary. This doesn't look as good as some of the matches in other games but it still keeps the essential excitement.

Championship Manager won't blow you away with super high-tech visuals but as management games have never really been under too close a scrutiny with regards to graphics anyway, as long as they work well enough it doesn't matter too much. The emphasis in the game is on good old-fashioned playability, but then again it may look slightly dated against the latest Premier Manager.

50%



There are a wealth of stats on players to help you to choose a good squad



The match day finally arrives – watch how your team shapes up

PLAYABILITY

There's a great deal to get to grips with in Championship Manager. It is a very in-depth simulation but is still a great deal of fun and remains as addictive as hell! There are plenty of up-to-date stats available to ensure you pick a winning team.

You can send your scout to look for new players and give specific instructions on the type of player you want and you have all the other tasks to keep an eye on too, whether it be player fitness or arranging friendlies.

As this is the Italian version you get to play in the Italian League which simulates Serie A and Serie B. In Serie A, 18 teams play each other twice (home and away). Serie B has 20 teams, who again play each other twice. You also get to play in the Italian Cup (La Coppa Italia). This starts with 32 teams with two from Serie A, 20 from Serie B and 10 from Serie C. The second round takes the 16 winners of the first round plus 16 from Serie A until it gets down to two for the final. You can also take part in the European Cup, the UEFA cup, the Cup Winners' Cup and the Anglo-Italian Cup, so there's absolutely loads to keep you occupied.

One thing to remember about this Italian game is that the playing style varies enormously. Teams in Serie A and Serie B have a more continental style, with a far more tactical element such as testing each other's strengths and weaknesses, and it leaves you with the dilemma of whether to bring your knowledge of English football into the game or adopt their style – so even experts have a new challenge!

85%

OPINION

70%

AMIGA SILVER AWARD

Okay, the game is still basically the original Championship Manager, so it keeps the great addictive playability of the first, but if you've played its predecessor to death then whether you buy it or not will depend on how much you want to have a version with the Italian League. Saying that though, it will provide a new challenge and it's great to see a different slant on the genre rather than just the English League.

There's going to be a great deal of competition around soon for football management games and although this isn't as modern or stacked full of new ideas, it sticks to its routes and remains as playable as ever. This is still one of the most realistic and stats-packed management games around, and if you've not experienced the joys of this title before or you want to try your hand at the Italian League, it's definitely worth giving this a try.

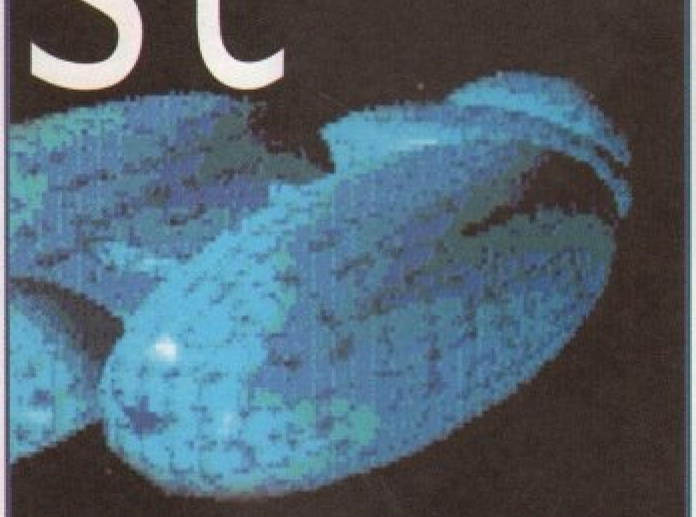
Beads of sweat roll down your body, trepidation delays each step you take, and terror grips your heart in its icy grasp. Killer droids and beasts of voracious appetite stalk the cramped, dimly lit corridors of this desolate cargo freighter; the invasion force of an alien race committed to the extermination of humanity. Strewn through

INTRODUCTION

the dark halls is evidence of the beasts' passage; corpses litter the grated deck and the sweet smell of blood is strong in the air."

This is how Angst is introduced in the manual – now why do I feel an anticlimax coming on?

Angst



The introduction sets the standard for what's to follow

Canadian software developers Rave may be new, but they show high ambitions. Gareth Lofthouse finds out if they can pull it off

Publisher: OEM Software
Developer: Rave Software
Disks: 9
Price: £29.99
Genre: Adventure
Hard Disk install: N/A
Control: Joystick, Mouse
Supports: Any Amiga, 1.5Mb+
Recomended: 68020



Medikits are one of the few items I've managed to find after an eternity of room searching



Straight into the action on the first level with an attack from the randomly appearing pod

SOUND

This is a bit better. True, the gunfire is thoroughly unsatisfying, but at least there's some sampled speech and the doorways open with a suitable noise. When you're being attacked by the pods there's a passable electric sizzling and the dinosaur monsters let loose a strangulated roar when killed.

However, you needn't expect any in-game music to increase the tension as you wander from dead end to dead end.

36%

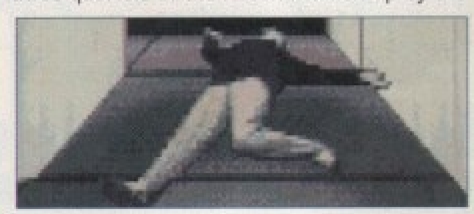
GRAPHICS

Set on a spaceship designed using Lightwave and featuring aliens developed in Imagine, the graphics for Angst could have benefited from two of the Amiga's finest creative packages.

Why then, does it look only slightly more colourful than your average database program? Why are those Lightwave-rendered walls generally so blank and featureless?

There are only five critters (sic) to fight within the game, and the ones I've seen are none too impressive. The first level features the pathetic pods with pincers, while later there are dinosaur monsters that could make the creatures in Deathmask look threatening.

Considering the lack of detail in the game, you'd think you could at least view the action through a decent sized window, but in Angst, three quarters of the screen is taken up by the



A body on the third deck – perhaps they died of boredom

control panel. There's not much excuse for this, because some of the icons there are just space wasters.

A lot of time is spent wandering around mazes, so the inclusion of a mapping device is a perfectly good idea. Unfortunately, this is so tiny as to be almost useless. It also updates very slowly, a problem Rave software say arises from the 'primitive radio wave technology' your character is using – hands up who's convinced.

30%

OPINION

26%

Visually unimpressive games can sometimes conceal gameplay of a surprisingly high calibre – just look at Tetris, for example. Sadly, there's no redemption for Angst in this department either.

Fighting aliens in claustrophobic corridors could be great, but there's zero skill involved and the whole experience is completely unconvincing. Add to that the tragic nature of the graphics and you should get a picture of how unsatisfying it all is.

There are supposed to be puzzle levels included as a break from the action, but my only experience of this was wandering around empty corridors, opening door after door and finding the odd key pass. I daresay there's more to it later on, but I think I did well to persevere for a couple of hours.

Unbelievably, Angst won't work with a 1Mb Amiga because the program requires another 512k of RAM to run. Other peculiarities include the fact that it can multitask, the benefits of which are unclear to me.

This game has been previewed elsewhere as some kind of Doom variant, but you only have to look at the screen shots to see how ridiculous that comparison is. If anything, it's more like the ancient Dungeon Master, only with inferior graphics and gameplay.

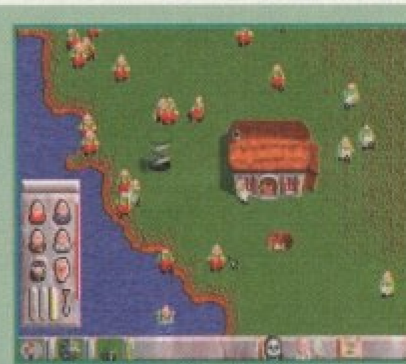
I'm sorry to stick the boot in on a game that has probably taken a lot of work, but it should **not** have been put out as a full priced commercial release. Angst means anxiety – presumably for the makers, because this game's about as exciting as a walk in a multi-storey car park.



Breeding Baldies will mean your energy bar gets replenished more rapidly – but beware, overpopulation can be a problem



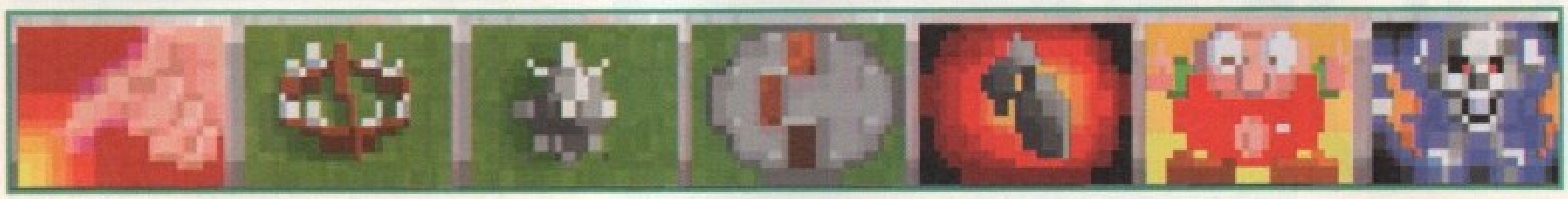
Heigh-ho, heigh-ho, it's off to work we go! The Baldies manufacturing weapons of mass destruction



Traps and perils abound – you can even drown Baldies in the sea

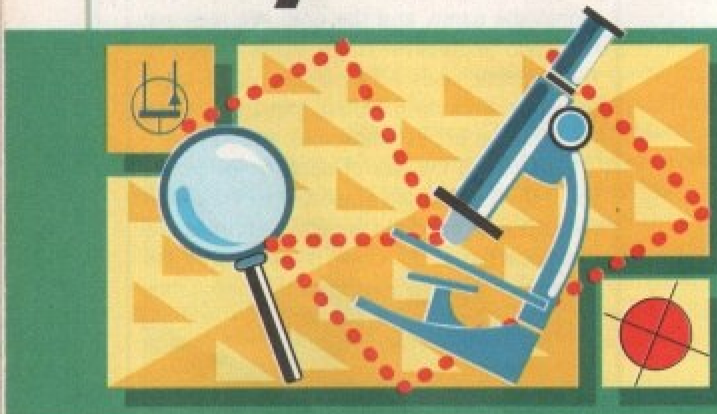


Selecting the hand icon will allow players to pick up and place the Baldies with point and click ease



Just some of those pleasant little inventions you can tinker with – traps, mines and firehead bombs will give you a good start

system analysis



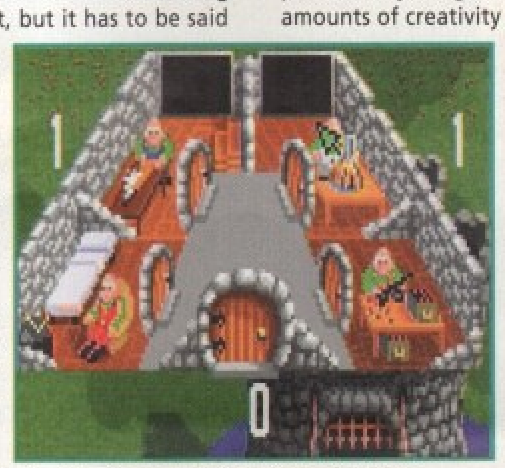
The follicly challenged are about to get some overdue recognition as heroes in Gametek's new arcade strategy offering. Gareth Lofthouse looks forward to a game that's going to be cute but cruel

This month seems to be one of extremes, with the ultra detailed sim accuracy of TFX at one end of the pole and the pure adrenaline-kicking action of Skidmarks at the other. Both are excellent, but it has to be said that the first can seem so serious as to be po-faced, while the other is fun but hardly involving enough to tie you up gaming for days on end.

Fortunately, gameplayers looking for fun *and* a small dose of mental stimulation won't have to hold their breath for too long. Developed by newcomers Creative Edge, Baldies is shaping up well to enter the exclusive top drawer reserved for classic games like Populous and Lemmings.

The Baldies may look completely harmless, but beneath their placid exterior it turns out they're a right old bunch of vicious, conniving creatures. The graphics are sweet and bright, but this game is about nothing short of tribal warfare.

Players will lead a band of Baldies through quirkily-themed worlds, their object being to collect materials, strategically invent devices and kill off the enemy tribes they'll inevitably encounter. Needless to say, however, the opposition is not going to take it lying down.



The attention to detail is obviously highly impressive, with different types of Baldies exhibiting differnt characteristics



Life is tough when you've got no hair - here one Baldy disappears into a hole left by a plant pit trap, while two others are victims of the spring

The game is controlled from a god-like position. To get started players will have to build houses for their Baldies and then find the right balance between collecting, inventing and breeding – yes, that's right, breeding, because no matter how unsavoury the act of baldy procreation may be, the bigger the tribe the more you'll be able to accomplish.

Our press release warns that this game is not to be compared to Lemmings or Settlers, but Baldies is going to appeal to fans of strategy games with arcade front-ends. There are also similarities to old favourites like Populous, Sim City and particularly Megalomania, but thankfully Creative Edge have injected large amounts of creativity and humour to give the title an original flavour.

Though Baldies will be a strategy game, the designers have concentrated their efforts on making it easy to control and get in to. In fact, any task that took more than two clicks on the mouse was abandoned in order to make sure the game was quick and easy to play.

There are going to be a number of different types of Baldy to control, ranging from workers and soldiers to scientists and giants. Each will have their own characteristics – some will have a nap when they're bored, while others will take shelter under trees when it rains.

Many actions taken by the player will be rewarded graphically. Drop a firehead bomb on your enemy, for example, and they'll run screaming and waving their arms in a torturous blaze of flame. It all sounds very pleasant.

A huge range of weird and wonderful inventions have been included in the game, though in the interests of playability they're introduced a few at a time as you progress



A number of tribes get together, but it's hardly happy families – just look at the devastated buildings

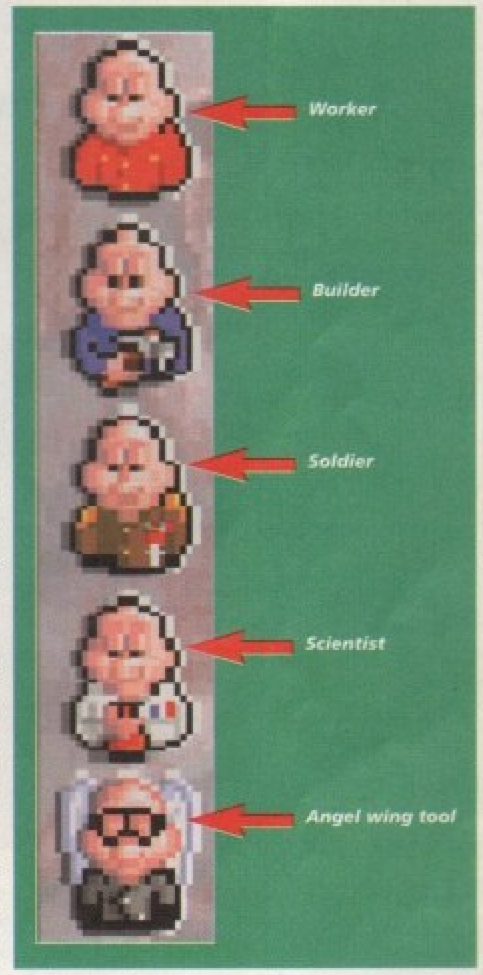


Baldies in the foreground have a minor altercation, while a mine further back will lead to some gory visuals



Though this is a strategic game with a lot of depth, the makers have tried to make it as simple to control as possible. Here the hand icon is used to pick up and move members of your team

Baldies



Baldies can grow up to enter five different professions, from workers and soldiers to the more eccentric scientists

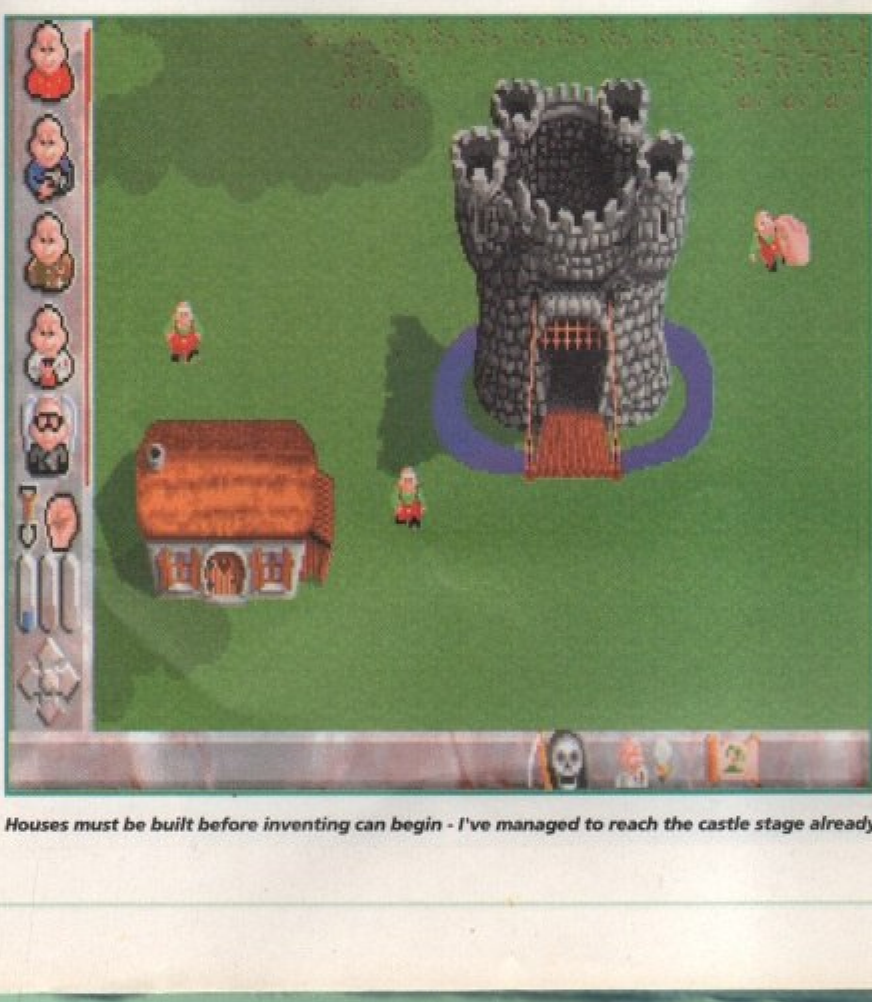
from level to level. Mines and fox traps are some of the first ones players will use, and they come in a variety of sizes to inflict varying levels of destruction.

If it's as good as it sounds at this stage, Baldies could be one of the few gaming experiences that will actually have you laughing. Mad inventions like exploding cows can be dropped on enemy houses or left on timers so that they blow up in fields. As you might expect, the consequences for any nearby Baldies will be gory.

CURIOUSER AND CURIOUSER

Cars will later become available, allowing players to mow down the enemy, while helicopters will take the murderous heroes to the air. Stranger still is the rabbit invention: Drop one of these on your house and you'll increase the Baldies rate of breeding.

By dabbling about on each level, players will begin to pick up strategies, and the more cruel and cunning the better. One tactic is to place a foxtrap outside your enemy's doorway, then drop a skunk on top of the house. This will have the effect of stinking the Baldies out, and of course as they come charging through the door there'll be yet another unpleasant fate awaiting them.



Houses must be built before inventing can begin - I've managed to reach the castle stage already

Players have to think strategically about how they extend their houses as well. Building a garage, for example, will allow your scientist to invent the car, and if you want that helicopter then you'll have to erect a castle.

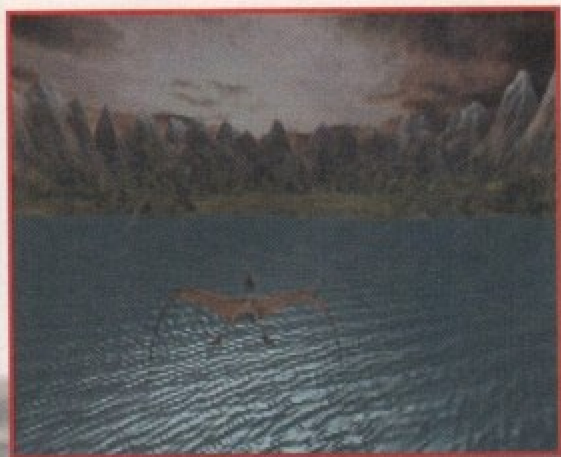
A lot of additional touches have been added for the sake of pure entertainment. There are Baldies who will snatch fish as they leap out of the sea, while a rather more seedy slaphead can be caught urinating on-screen.

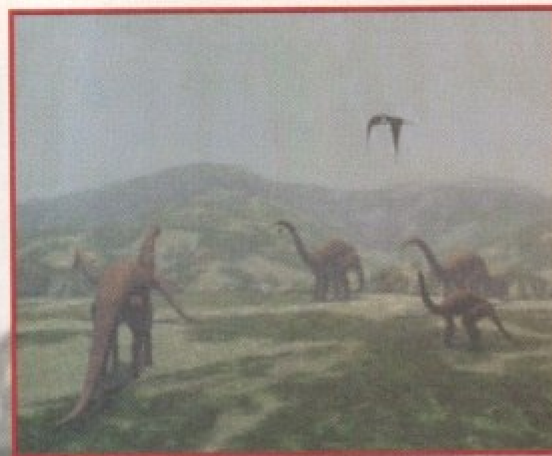
Players will have the opportunity to vent their malice over a variety of themed levels, many of which have already been designed. Creative Edge haven't yet decided which ones are going to appear in the final game, but you might find an Antarctic land in which Baldies can die of exposure or a hell level featuring demonic housing.

Naturally, you can go up against computer-controlled tribes, but the option to link Amigas and challenge a friend promises an extra level of enjoyment. In fact, it's this factor that makes it reminiscent of an ancient Spectrum game called Spy Versus Spy. Like Baldies, the object of this game was to spring traps on your friends, allowing you to savour their expressions as their character helplessly exploded, got squashed or frazzled. Bringing this type of sadistic appeal into the Populous genre should give Baldies added originality and an addictive buzz.

How well the game turns out remains to be seen, but it's encouraging to see the amount of effort gone into designing Baldies for playability. It's often said that the best games have simple rules while offering a challenge with depth. This is equally true for computer games, and with the strategy element combined with an arcade-style method of controlling, the game sounds very promising.

Forget suicidal rodents – the Lemmings series hasn't progressed much since it's first incarnation anyway. We'll be giving this game the definitive *Amiga Computing* assessment as soon as possible, but as it stands Baldies could give Gametek another winner and make Creative Edge a name to remember.

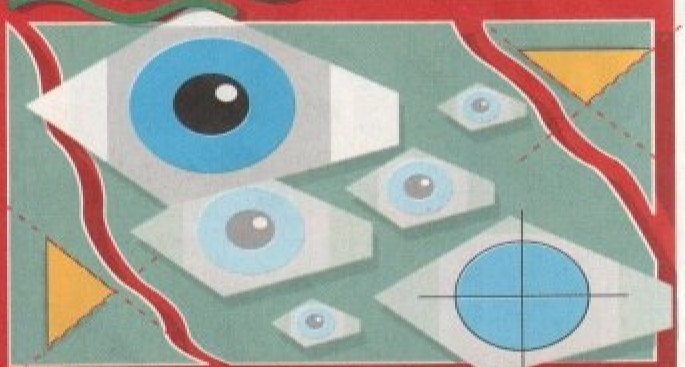

Every attention to detail has gone into making the sets as realistic as possible


Some of the larger dinosaurs convey their size well and their sheer enormity comes across


The animation of the creatures makes them very lifelike

system preview

Lost



Would you Adam and Eve it? Tina Hackett didn't when she took a look at Cryo's gorgeous new adventure concept, coming to a CD32 near you soon

PC CD-ROM owners have been somewhat spoilt of late, having a wealth of quality adventure titles to choose from, while the humble CD32 owner had to merely look on and drool. But all that is set to change because there's an adventure coming your way soon that is going to take the CD32 by storm. Okay, admittedly it was out on the PC CD-ROM first, but a version for the CD32 is well under way and if it stays true to its predecessor (which we're promised it will – if not better!) we could be about to witness a whole new era for the machine that has been perceived by some as the underdog.

Containing 3D rendered graphics and full speech throughout, Lost Eden looks to be something totally different to anything done on the CD32 before. Development is by Cryo – the French team behind KGB and the CD version of Frank Herbert's Dune.

The actual concept is quite unusual for an adventure and takes place in a time when dinosaurs and humans roam the earth. But the dinosaurs fall into two types: The non-violent vegetarians and the blood thirsty predator types like the Tyrannosaurs. Moorkus Rex is the Tyrannosaurs leader and wants to destroy the human race so that he can rule the whole planet. Humans hide out in caves but they still fair badly against the aggressive attacks.

One town, however, staves off the invasions. This is the Citadel and is the first fortified place of mankind. Built by Priam the Builder, this fortification has protected the Priam dynasty from the Tyrannosaurs and you, as Adam, must discover the secret of the Citadel because you will soon have to succeed your father, Priam the Conqueror. Gameplay focuses on wandering around the environment, picking up clues and solving the puzzles. These promise to be fairly straightforward and logical rather than those frustratingly obscure puzzles found in some adventures.

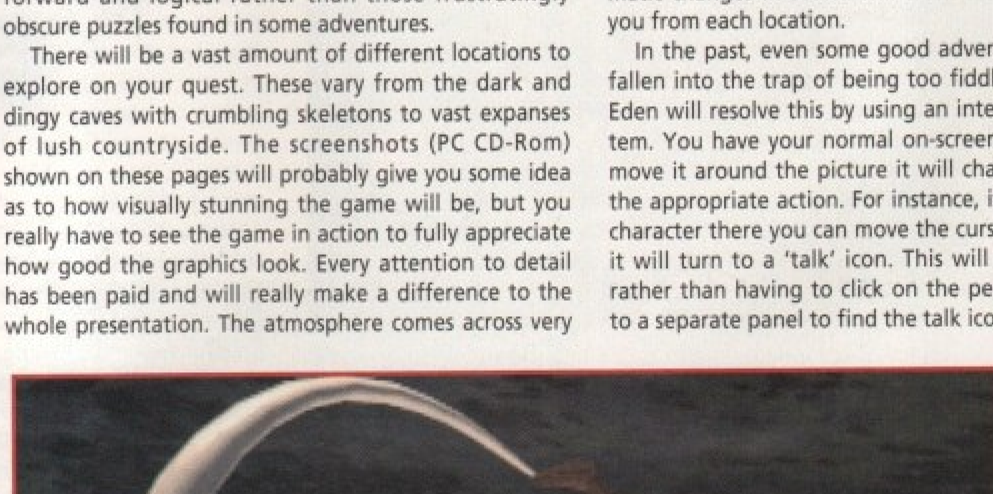
There will be a vast amount of different locations to explore on your quest. These vary from the dark and dingy caves with crumbling skeletons to vast expanses of lush countryside. The screenshots (PC CD-Rom) shown on these pages will probably give you some idea as to how visually stunning the game will be, but you really have to see the game in action to fully appreciate how good the graphics look. Every attention to detail has been paid and will really make a difference to the whole presentation. The atmosphere comes across very strongly and with each of the settings you will feel as if you are actually there.

The characters are rich and vividly portrayed too. Each has a wide range of mannerisms and features that create their personalities and backgrounds well. The animations are very smooth and life-like, especially with the dinosaurs who move realistically – well, as far as we know! For example, the bigger dinosaurs actually look heavy and cumbersome.

ENHANCEMENTS

The music will enhance the game considerably and each environment will contain different sound effects to reflect the atmosphere. As you walk around, the dramatic changes in sound will work well in transporting you from each location.

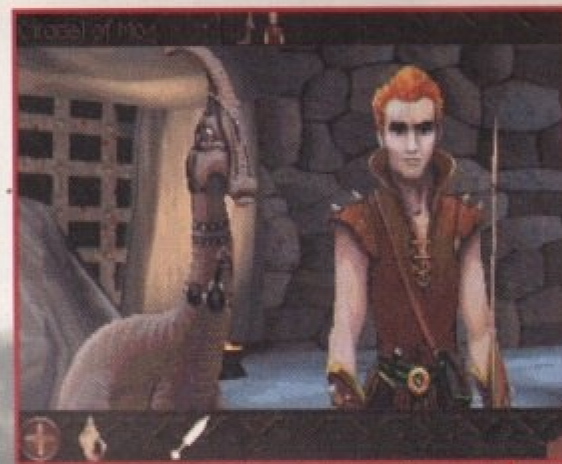
In the past, even some good adventure games have fallen into the trap of being too fiddly to control. Lost Eden will resolve this by using an intelligent cursor system. You have your normal on-screen icon and as you move it around the picture it will change according to the appropriate action. For instance, if there is another character there you can move the cursor over them and it will turn to a 'talk' icon. This will make life easier, rather than having to click on the person and then go to a separate panel to find the talk icon.


All the settings, both indoor and out, will be packed with atmosphere



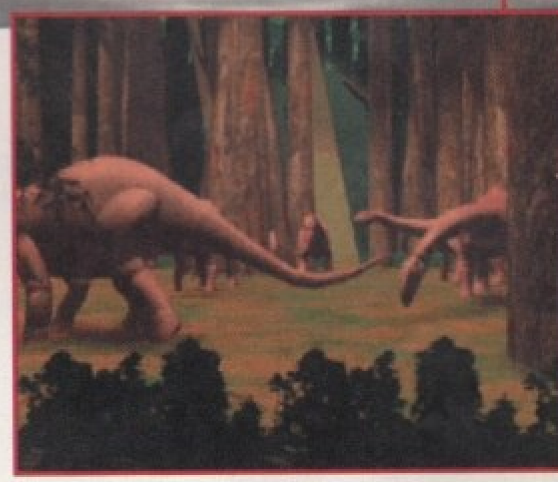
The text at the bottom reinforces the speech





As you walk around the locations you will need to look carefully for important clues

Eden



The backdrops are absolutely stunning and highly detailed

Another useful feature will be the map system which will allow you to move from one place to the other simply by clicking on the area you want to go to. The icon also lets you move around freely and turns to an arrow to show you where you can travel, and if you've come to the end of a section it becomes a stop symbol – this will save precious time.

What will really make Lost Eden stand out on the CD32 though is the full speech system throughout. As you meet with each character they will talk to you and impart vital clues. All the characters will have their own voices with appropriate accents, and their tone of voice will match what they are saying – not like in some speech adventures where the characters mumble on in monotone! The actual things they say will be useful too and not there for the sake of it. If you've heard the information before you can skip it, but if you miss anything the information is backed up by text underneath.

Obviously, until we've played the final version we can't comment on how the actual gameplay will shape up, but it's fair to predict that with the fantastic graphics, full speech and an intriguing plot already implemented, it has plenty of ingredients to ensure one hell of a title. Lost Eden will be released in the very near future, so look out



There's no doubt that the game will be visually striking

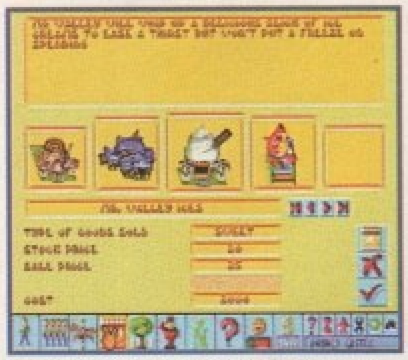
Team talk

The team behind Lost Eden are Cryo Interactive Entertainment. Established in January 1992, they now have a network of 110 programmers, graphic artists, designers and musicians. Cryo has a wide range of different ventures and as well as developing for many platforms, from the 3DO to the SNES, Cryo also have connections with film production through its parent company, Compagnie des Images.

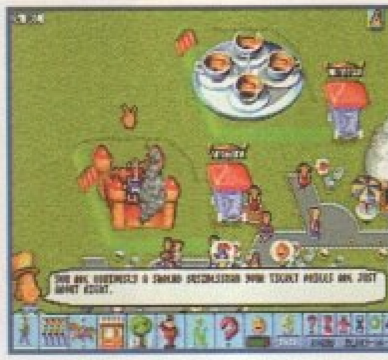
In 1993 Cryo embarked upon a joint venture with ID3D, a computer graphics company, and Publicis, an advertising agency. The company concentrates on the production of digital images for feature films, advertising and multimedia. Sony Music, L'Oreal, Esselte, France Animation and Canal+ are among their clients.

Cryo have interests in film and television and are developing a feature film with Canal+ and a TV series using high-end computer graphics with Gaumont Television. The company also has connections with Dark Horse Comics, the number four comic book publisher in the USA.





Theme Park can be played in three ways, whether you want a complex business sim or just the basic elements



The game looks spectacular and everything has been well animated

system essentials



It's re-release time again. This month Tina Hackett prepares to fly with Guardian A1200 and explores all the fun of the fair with Electronic Art's Theme park for the CD32

Theme Park

AMIGA PLATINUM AWARD

Theme Park is now available for your CD32. Bullfrog's hit business sim, which requires you to build your own amusement park, has been tweaked, enhanced and made all that bit nicer for the CD version. You start off with your piece of land and can then go on to build rides galore, hire staff, purchase shops and attractions and everything else that will turn your park in to a success story.

However, life isn't that easy. There are other, greedier, entrepreneurs trying to lure the Joe Public into their parks instead. It's not just a case of building the biggest and best attractions either, because being a shrewd businessman comes into it too. You have to negotiate salaries, plan your site, and keep an eye on the little people's opinions. Luckily they don't keep their thoughts to themselves because a memory bubble appears over their heads letting you no if they are hungry/thirsty/tired of walking/think your park is a con etc. and you can alter your park accordingly.

Graphics are superb and will make the most hard-hearted go "Aaah." Each ride has been well animated and even the little sprites are endearing. The sound effects work well too and create the atmosphere of the park, with children laughing in the background and music playing for the different rides.

Three different simulation levels enable you to play the game as simply or as complex as you want. Sandbox level is for beginners and you won't have to worry about all the financial decisions. The next level brings in some of the managerial aspects where you'll have to negotiate with staff and so on. And if you want the proper business simulation you can play on Full level, whereby all the finances are down to you and rivals can buy shares in your park.

The differences to the CD version are mainly cosmetic and the intro has been improved. Another thing to note is the use of a CD controller rather than a keyboard/mouse, but this is slightly more fiddly. However, this is still a highly recommended re-release for CD32 owners and for a light-hearted, but in-depth business sim, you couldn't go far wrong with Theme Park.

- Publisher: Electronic Arts
- Developer: Bullfrog
- Disks: N/A
- Price: £29.99
- Genre: Business simulation
- Hard disk install: N/A
- Control System: Joypad
- Supports: CD32
- Recommended: CD32

90%

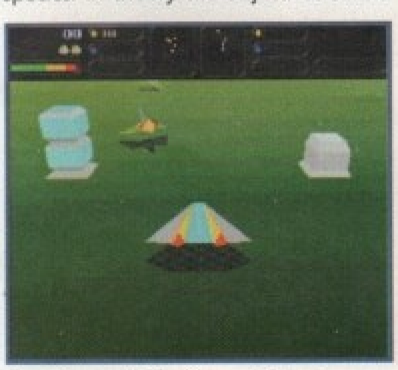
Gaurdian A1200

AMIGA GOLD AWARD

- Publisher: Guildhall
- Developer: Acid Software
- Disks: 2
- Price: £25.99
- Genre: 3D shoot-'em-up
- Hard Disk Install: Yes
- Control System: Mouse/Keyboard
- Supports: A1200
- Recommended: 68020

This fast-paced shoot-'em-up was a huge success on the CD32 and thankfully it's now been converted to the A1200, so those lucky enough to own one can enjoy one of the finest 3D blasters on the Amiga.

Guardian is set in the future in a shrinking universe only a few light years in diameter. Different life forms are battling for the last resources and it is your job as a 'Guardian' to protect the remaining human species. In theory the objectives sound fairly simple but as always, the reality is far different. You have a nice big spacecraft, armed to the teeth with weapons, and with it you must destroy the Dronoids – alien craft armed with Trilium bombs. You track them down with your scanners and choose whether to launch smart bombs or tracking missiles.



Guardian really looks smooth even when the screen becomes chaotic

As this was originally a CD32 game, control is either via a Control Pad or a combination of keyboard and mouse. This is a little strange at first but still works exceptionally well, giving you full control over your spaceship. You can perform backflips which allow you to get enemies in your sight, and with the enemies following different patterns of attack things get very challenging.

The 3D polygon graphics still look good and the action is incredibly smooth. Sound-wise it isn't bad, especially with explosions, bangs and engine roars going off left, right and centre – you really do get the satisfying blast-'em-up feel of the game.

The gameplay is fast and frantic and as you progress things become very chaotic – it gets the adrenaline pumping, making it an excellent example of its genre. A1200 owners should thank their lucky stars that this is now available and if pure blast-em-ups are for you, then I'd say this is an essential buy.

82%

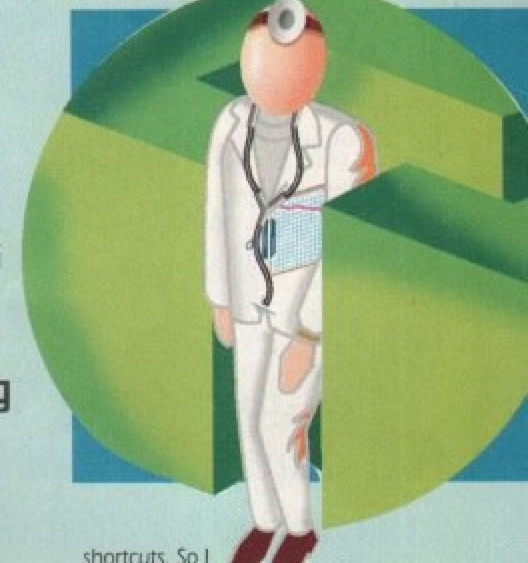


AMIGA GUIDE

Leading the way in Amiga advice, the definitive guide is back to keep enthusiasts fully informed

Tidying up

Amiga Medical Part 4



Organisation is the name of the game as Frank Nord gets Directory Opus running to his satisfaction

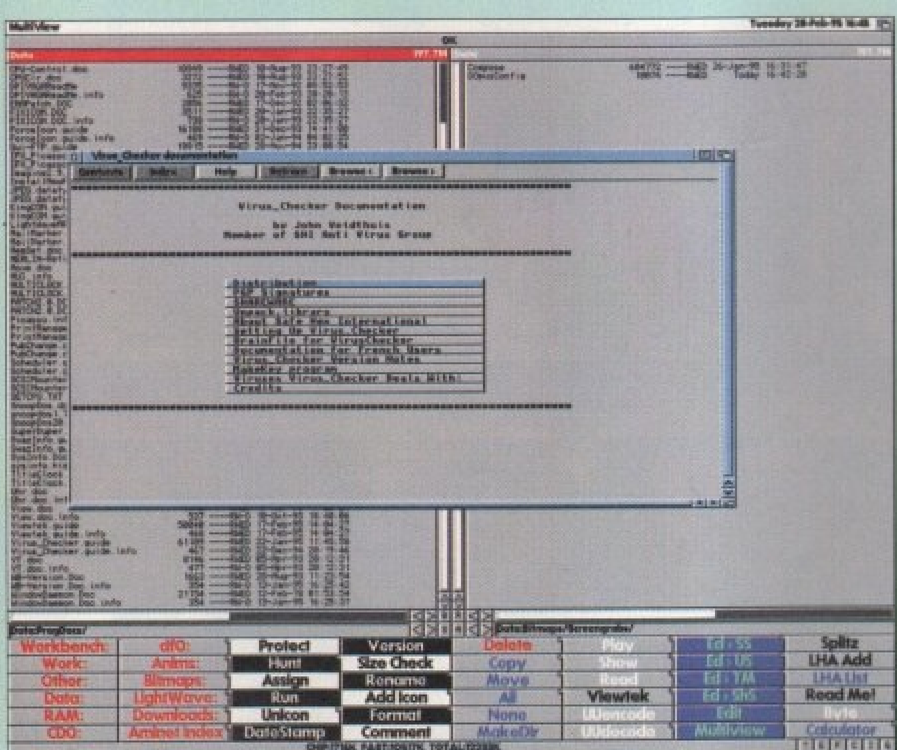
All of you, I hope, have some sort of directory and file utility running on your Amiga, and some of you may even have Directory Opus, a program that simply cries out for configuration, the topic of this month's medical.

To make best use of DOpus you should try to give as much space as possible to the directory windows; use a small font for the buttons and title bars, run in a higher resolution, that sort of thing. Then finally, and most importantly, do some surgery on those buttons.

One of the first things I changed when I got my copy of DOpus was the fact that although you could copy files to the destination directory by dragging and dropping them, you unpacked LHA archives by doing the same thing. Uh-uh. No. LHA is a distinct file type, so it is really easy to set up a command for DOpus to use if you double-click on it. Make the Click-M-Click function into copy, the same as it is for normal files, and make extract a double-click function.

Following this, let's play around with those Copy, Copy As, Move, Move As buttons. I like the simplicity that single key shortcuts give, whereby if you want to copy something you hit the 'c' key. Why not duplicate this in DOpus and go further – make Copy As 'shift c', and Move 'v' and Move As 'shift v'. OK, you've still got Delete to assign to a keyboard shortcut – you could use 'x' to carry the analogy further – but there is a key just crying out to be used as a shortcut for this command; the 'Del' key.

Okay, now we're rolling. There are actually filetypes set up for more file types than DOpus actually has commands for in the default configuration, so let's make use of some of those. If you own a copy of GPFax, you can get DOpus to show all your FAXX files – you can also get DOpus to show 24-bit pictures on a non-24-bit system by assigning the Jpeg and ILBM 24-bit filetypes to a viewer like Viewtek.



Look no Workbench, ma! And asynchronous operation to boot, he said in a smug voice

VIEWING

There's now a utility you could run from DOpus to view Imagine and Lightwave objects in a window so you can pick out all your 3D models. If you are lucky enough to own a 24-bit display card of some description, you can set up filetypes to show 24-bit and Jpeg'ed pictures on that, along with 24-bit animation formats like AVI or Mpeg – provided your card has software that supports those file formats.

Another thing I don't like about DOpus is its drivelist buttons. If you re-read the list in the ConfigDopus program, they lose all their shortcuts. So I never bother to use it, except for those first six buttons. If I want to get easy access to an assign, say, or a drive that might not be on my system all the time, like a CD-ROM or ParNET, I make a normal button for it. This has the added advantage that you can have two complementary drives in the same place, accessed by clicking either the left or right mouse button. For instance, I now have a button that has Downloads: on one side and Uploads: on the other. You can do the same.

If you are running DOpus on a Workbench 3.x machine, what about viewing AmigaGuide documents on the same screen? Make a button for this, or create a filetype to recognise AmigaGuide documents as opposed to plain ASCII text files. (Have a look at some AmigaGuide documents, they always contain the word '@database' at the start, so you can use the 'Match' command to check for this). Then specify an AmigDOS command to view the AmigaGuide documents:

```
sys:utilities/multiview {f} PUBSCREEN
"DOPUS.1"
```

When you double-click on one of these documents, the Multiview window will appear on your DOpus screen instead of the Workbench.

One more thing. Are you still opening up a shell window and typing: ed S:startup-sequence. Make a button in DOpus that lets you edit all those script files without having to enter their names by hand. In addition to Startup-sequence and user-startup, you might also consider adding Ed-startup, if you use Ed a lot, Shell-startup, if you use the shell a lot, and if you run Parnet quite often, what about an 'Edit Net:Sys/s/startup-sequence' button. If you want to run other programs from within DOpus, like Multiview, make sure you have the Asynchronous flag switched on, so you don't have to wait until you've finished reading that document, or whatever, before you can get on and copy some files.

Acronym alert – part two: G-P

GUI: Graphical User Interface. A visually-oriented system allowing you to tell a computer what to do by using visuals symbols rather than typing in commands.

HAM: Hold And Modify. An Amiga graphics mode that allows all the 4096 colours in an ECS-based Amiga's palette to be displayed on screen at once.

IDE: Integrated Drive Electronics. The other popular hard drive standard. IDE drives don't tend to be as fast as SCSI ones and due to limitations within the IDE spec, can't go up to sizes as large as SCSI.

IFF: Interchange File Format. Although people refer to pictures on the Amiga as being IFF, this is not strictly true. IFF is a standard developed by Commodore for creating file formats that can be used with any machine and any file type.

Thus Amiga pictures are actually in the ILBM (qv.) format, IFF sound samples are in the 8SVX format, etc.

ILBM: InterLeaved BitMap. The Amiga IFF picture file format.

JPEG: Joint Photographic Expert Group. The now famous interpretive image format which can make still 24-bit images as small as 1/100th of their original size. See also MPEG.

MMU: Memory Management Unit. For a 68020 the MMU is a separate chip called the 68851. In a full 68030 (not 68EC030) or 68040, the MMU is inside the main chip.

MPEG: Motion Picture Expert Group. A new standard required for animations. MPEGs are like a single JPEG image followed by a stream of delta images (delta images only store the changes between the previous frame and the current frame) interspersed with further JPEG images to act as checkpoints.

PCMCIA: Personal Computer Memory Card International Association.

mini Office

The perfect all-in package for your home or business saving you £30



Mini Office
Full package
Save £30
Only £29.99
RRP £59.99

mini Office Order form

Please send me:

Mini Office at the bargain price of £29.99 (including VAT and p&p)– saving £30 off RRP

Deliver to:

Name (Mr/Mrs/Ms/Miss) ______________________

Address ______________________

____

Postcode __________ Daytime phone ______________

I wish to pay by:

☐ Cheque/postal order payable to IDG Media

☐ Credit card

Card No. ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ Expiry Date __/__

Please allow 28 days for delivery while stocks last

☐ *Tick this box if you do not wish to receive promotional material from other companies*

mini Office is a powerful and flexible integrated package capable of performing a vast array of home and office business tasks. Its five modules include:

- A professional **WORDPROCESSOR** with powerful graphics capabilities and a 50,000 word spellchecker.

- A supremely friendly **DISC UTILITIES** program to make using your mini Office Amiga as painless a task as possible.

- Incredible **GRAPHICS** with graphs and charts available to brighten up your presentations and make your month-by-month financial situation as easy to appreciate as possible.

- Plus the versatile **database** and **spreadsheet** you have from last month's CoverDisk. The database is simple to use and can deal with anything from address book functions to club membership lists and business records. The spreadsheet is flexible with more than 50 functions, simplifying complex domestic monthly budgets or commercial cash flow forecasts.

This is another great *Amiga Computing* special offer; the entire mini Office package for just £29.99 – amazing! Complete the order form now and send it with your payment to mini Office Offer, IDG Media, Media House, Adlington Park, Macclesfield SK10 4NP.

A500, A500+, A600, A1000, A1200, A1500, A2000, A3000, A4000 Compatible with Workbench 1.3

Demon Internet

Terms and conditions for a trial offer of a Standard Dial Up account with Demon Internet ltd.

The account

Standard Dial Up normally costs £12.50 to join and £10 per month – prices exclude VAT. All accounts are renewed automatically on an annual basis and you are joining our service on an ongoing basis. Those people for their accounts annually receive a VAT invoice and those wishing to pay monthly may do so but should note that we do not issue VAT receipts for monthly applicants.

The offer

Up to 45-days free use of an account. This is a fully working account with no restrictions. In return, we simply ask you to provide a method of payment (see below) which we will use should you not cancel your account. If you cancel during the trial period you will have paid nothing. If you do not cancel, we will automatically cash or collect your money. You may indicate on the voucher the date from which you would like your account to begin. Note that if you join before or on the 15th of any month, you will get the rest of that month free. If you join on the 16th or later in any month you will also get the following month free.

The terms

Applicants must fill out and send a bonafide Amiga Computing voucher to Demon Internet. Duplicates/photocopies are not allowed. Incomplete or illegible vouchers may be destroyed.

Enclosed with the voucher must be a post dated cheque for £155.68 for a year's connection, or credit card details indicating that you wish to pay monthly.

Should you decide to keep your account, as we hope you will, you will be charged the joining fee and the first month's fees. Note that you will have enjoyed a charge free period regardless. All payments are due in advance of using any service.

Cancellation

You may cancel in writing at any time. If you cancel during the trial period you will have paid nothing. If you cancel later on and pay monthly, your account will close at the end of that month. If you pay annually we will refund the number of whole months outstanding on your account. We can only refund using the same method by which you pay.

Name: ....

Address: ....

....

Tele. No. .... Account start date....................

We require three nodenames of your choice to choose from should a duplicate exist within our system. We will confirm which of the three nodenames have been chosen for your account.

Nodename 1: ....

Nodename 2: ....

Nodename 3: ....

Credit card details

Access/Visa ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐ Expiry date __/__

Send your completed voucher to:

Demon Internet Ltd
Gateway House
322 Regents Park Road
Finchley, London, N3 2QQ

0181-371 1234 (Sales - London)
0131-552 0344 (Sales - Edinburgh)
0181-371 1010 (HelpLine)
0181-371 1150 (Fax)
0181-371 1000 (Switchboard)
e-mail internet@demon.net

Amiga 3D Part 2



Getting the picture

Stevie Kennedy examines a simple way to make realistic models as quickly as possible and without the aid of an expensive 3D digitiser

Neither you nor I could count the number of times the 3D modelling beginner will finish a complex object that has taken many hours of work, then scratch his or her head and say "y'know, it doesn't look quite right." The problem is usually one of overall proportion and shape, and even a very carefully constructed model can be ruined by subtle inaccuracies.

Keeping a model in tune with the real world object or design you've based it on is a lot easier than you might think, and as long as you have a hand scanner or digitiser you should never have to resort to guesswork. Unless you have a photographic memory and artistic skills to match, designing an object off the top of your head only works with completely fictitious shapes such as spaceships.

Even in this area, though, starting with a set of blueprints is preferable to jumping in with both feet. Creating plans for an object in advance is the best way to decide exactly what shape it will take, how complex it needs to be, and whether it looks any good to begin with.

If you draw these blueprints on paper, they can be scanned in, and if you create them in Dpaint just save them to disk as an IFF. Plans for real-world objects can be scanned from photographs or grabbed from video using one of the many low-cost video grabbers such as VLab or Vidi Amiga, and once on disk they can be used as a cheat's shortcut to accurate modelling.

We'll look at Imagine 3.0 and Lightwave for examples of how this can be done, but the technique used by both programs is very similar. On Lightwave, use Layout to load the various scans, grabs or drawings you've created, then go to the display options panel in modeller to set the background image on the X, Y, or Z axes.

Imagine users can select a backdrop image from the View menu and it will appear in whichever of the three views was last active.

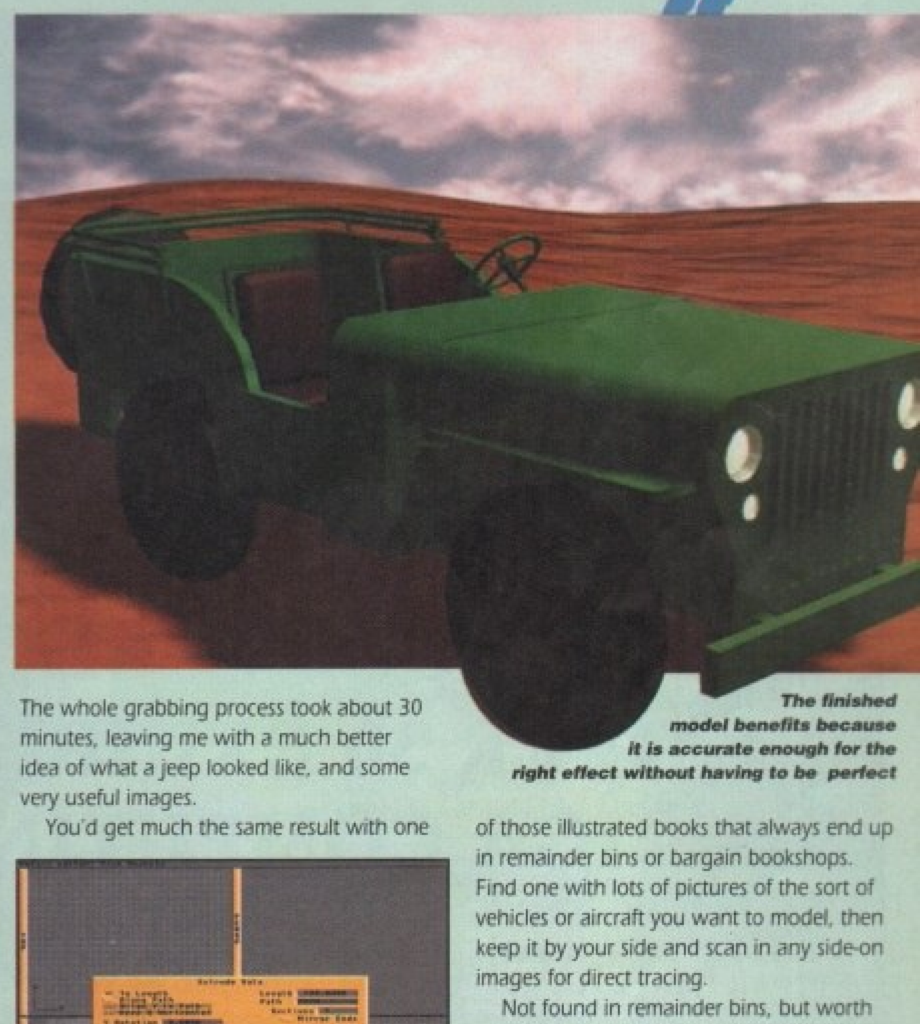
Of the two packages, Imagine works with backdrops more accurately because it automatically retains pixel aspect ratios, but Lightwave users can edit the image's dimensions to compensate if the picture comes in looking a little stretched.

For an example, I've used an American jeep modelled in Lightwave, though the same process could easily be used in Imagine. First, a search through my old videos produced a tape of A Bridge Too Far, which is ideal because there are zillions of jeeps in the movie.

GRAB AND SAVE

Next, VLab was used to grab a skipload of images from some of the jeep-laden scenes, the images then saved to hard drive as basic 16-colour greyscale IFFs. After all, you don't need to bother with huge 24-bit scans and grabs if all you want is an outline to follow. Some of the grabs were taken with tracing in mind, and I took care to capture frames when the camera was looking directly at a jeep's front or side views.

Other images were taken with jeeps in different positions, distances from the camera, and so on to be used as reference.



The finished model benefits because it is accurate enough for the right effect without having to be perfect

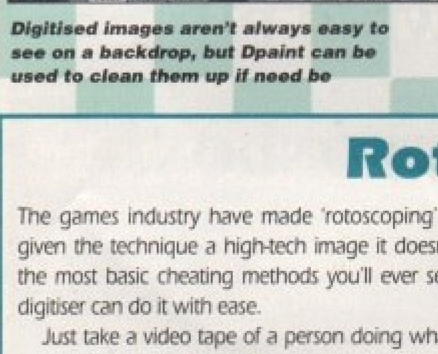
The whole grabbing process took about 30 minutes, leaving me with a much better idea of what a jeep looked like, and some very useful images.

You'd get much the same result with one of those illustrated books that always end up in remainder bins or bargain bookshops. Find one with lots of pictures of the sort of vehicles or aircraft you want to model, then keep it by your side and scan in any side-on images for direct tracing.

Not found in remainder bins, but worth their price to any modeller, are the Janes series of reference works. These, in common with the Observer series, usually have a photograph and side, front, and top elevations shown in wireframe. They might have been designed for 3D modellers, and just one book can contain outlines for dozens of aircraft, ships, or vehicles.

Plastic model kits are another source of good blueprints, and they have the bonus that you can build the model to keep as a 3D reference. With a cheap greyscale hand scanner, you'll have as accurate a template as you can wish for in only a few minutes.

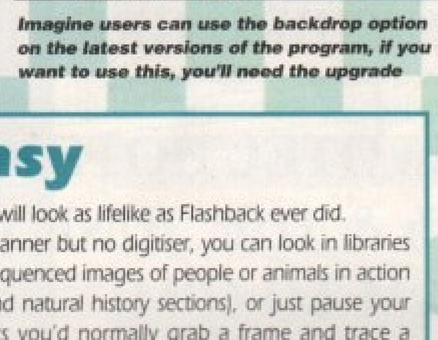
Whatever your chosen method, capturing and using good images of the object you are trying to model makes for the best start in any project. If something doesn't look quite right, your finished image or animation can be ruined by something as simple as the wheels looking a bit too large – hardly the result you want after all that modelling and rendering.



Digitised images aren't always easy to see on a backdrop, but Dpaint can be used to clean them up if need be



If an image isn't a clean, side-on view, you'll have to compensate for the angle at which you have to trace



Imagine users can use the backdrop option on the latest versions of the program, if you want to use this, you'll need the upgrade

Rotoscoping is easy

The games industry have made 'rotoscoping' into a buzzword and given the technique a high-tech image it doesn't deserve. It is one of the most basic cheating methods you'll ever see, and anyone with a digitiser can do it with ease.

Just take a video tape of a person doing whatever it is you want to recreate on screen – walking, running, jumping, kicking a ball, serving in tennis, and so on – then grab a number of frames from the complete action sequence. These can then be used as backdrops to ensure your human model is put into the correct postures at the correct time, and your finished animation will look as lifelike as Flashback ever did.

If you have a hand scanner but no digitiser, you can look in libraries for books that include sequenced images of people or animals in action (try the photography and natural history sections), or just pause your VCR at the same points you'd normally grab a frame and trace a matchstick outline of the position of the person's limbs. Use these as a guide or scan in your matchstick drawings and use them as IFF backdrops.

Accuracy is always worth the effort.

Presented in association with AMIGA COMPUTING, ST FORMAT and enthusiastically supported by GASTEINER

IF IT'S 1995 THAT MUST MEAN ANOTHER BREATHTAKING

ATARI AND AMIGA SPOTLIGHT SHOW!

THE ONLY PLACE TO BE...

SPOTLIGHT '95 SHOW

★ GREAT SHOW OFFERS ★

OVER 30 EXHIBITORS INCLUDING AMIGA COMPUTING AND ST FORMAT

SEE, TRY AND BUY FROM A WIDE RANGE OF THE LATEST AND BEST PRODUCTS AND SERVICES FROM AMIGA AND ATARI MANUFACTURERS, DEALERS AND DISTRIBUTORS

"NOW IN ITS THIRD GREAT YEAR AND GROWING FAST"

PLACE: NOVOTEL HOTEL, HAMMERSMITH, LONDON.
DATE: 10th & 11th JUNE 1995
TIME: 10AM TO 6PM
TICKETS: £5.00 CHILDREN UNDER 5 FREE

For advanced booking phone Gasteiner on 0181-345-6000 or Fax on 0181 345 6868

Remake, remodel

Phil South turns his attention to a contribution sent in by an avid Amos fan

This month's programs were sent by BL Gaunt – I wish people would send their first names, it's much more personal. Actually, they are called procedures or PROCs, as that's what they are, and as such they can be bolted onto any program. The PROCs are Shadowtext and Typewriter, the latter being a better version of the program included with Amos Pro. Both programs work in Amos Pro and AMOS 1.3.

To start off we'll look at the Typewriter PROC. The code is good because it makes a noise if there is a letter to type, and if there is a space it remains silent. The sample provided is the sound of a typewriter key, which could, of course, be replaced by the sound of a computer keyboard if you want to be a bit more modern. The font could also be changed to make it a useful special effect for science fiction films. The proper usage of the PROC is:

```
TYPEWRITER[X,Y,S,T$]
```

where X,Y equals the location on the screen, S is the speed the text is typed at, and T$ is a string of text to be typed.

First off the initialise screen line is:

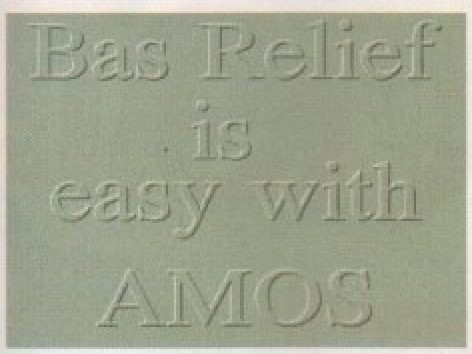
```
Screen Open 0,640,256,8,Hires
```

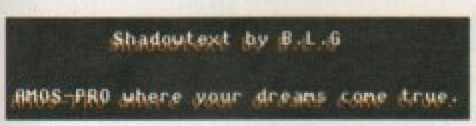
and then a sample bank is set:

```
Sam Bank 3
```

This refers to the sample of a typewriter key being hit, which you must load into bank 3 by hand before you start coding – it will then be saved with the program. Finally, before we get into the routine you turn off all the screen junk:

```
Flash Off : Paper 0 : Curs Off : Hide : Cls 0
```





This now means we are starting with a clean sheet of paper.

The text to be typed is fed into the procedure, as are the other attributes:

```
_TYPEWRITER[10,10,8,"Wow!  Typewriter effect with sound too."]
_TYPEWRITER[1,12,8,"Now we seem to be going places. No more need to wave a dead chicken."]
Clear Key : Wait Key : Edit
```

The clear and wait are included to make sure the finished text can be seen before the program ends.

The procedure itself is very simple:

```
Procedure _TYPEWRITER[X,Y,P,A$]
```

Firstly, set up the length of the text in your string in characters using the LEN function:

```
For B=0 To Len(A$)
```

Then using the Right$ function, grab the first character in the string:

```
If B>0 Then A$=Right$(A$,Len(A$)-1)
```

Check for spaces in the text, and if any are found you don't play the sound:

```
TEST=Asc(Left$(A$,1))
If TEST>32 Then Sam Play 1,1
```

Next use Locate and print string to the screen:

```
Locate X,Y : Print Left$(A$,1)
Inc X
```

using the Inc command to move along to the next letter. Finally, insert a small wait command to delay the characters as they type onto the screen:

```
Wait P
Next B
End Proc
```

And that's it. Quick and easy, and a rather good effect. If I was using it for a film effect, I'd add a random element to the pauses between frames, just a little, to simulate the way people type.

Now I'll move on to Shadowtext. This creates drop shadows on the text on screen, and it's a nice routine which adds a little bit of pizzazz to game programs and any sort of multimedia. The proper usage of the PROC is:

```
_SHADOWTEXT [X,Y,SC,TC,T$]
```

where x,y = Text position, SC = Shadow colour, TC = Text colour, and of course T$=Your text string.

Firstly, round up the usual suspects:

```
Screen Open 0,320,256,4,Lowres
Flash Off
Curs Off : Hide On : Cls 0 : Wait Vbl
```

to set up the screen. Then we can feed the data to the PROC:

```
_SHADOWTEXT[75,100,1,2,"Shadowtext by B.L.G"]
_SHADOWTEXT[10,130,1,2,"AMOS-PRO where your dreams come true."]
Clear Key : Wait Key : Edit
```

This is the same ending as before, with a clear and wait so you can see the effect. Now we define the PROC:

```
Procedure _SHADOWTEXT[X,Y,SC,TC,T$]
```

The first thing we do in the PROC is to enable JAM1 mode via the Gr Writing command:

```
Gr Writing 0
```

Next we set up a loop:

```
For A=0 To 1
Ink SC
If A=1
```

By changing the values of X and Y you can increase the depth and direction of the shadow:

```
X=X+3 : Y=Y-3 : Ink TC
```

The end/if and the Text command end the loop and print the text to the screen:

```
End If
Text X,Y,T$
Next A
End Proc
```

and it returns for more, if there is more. If not it ends the PROC, returning you to the main program.

Lurking in the shadows

This is an interesting routine, nicely coded and you could expand on it in a number of ways. For example, create a white drop shadow with no letters (a very trendy text effect) by making the colour of the letters the same as your background, and making the colour of the shadow white or at least a lighter tone of the same colour. Another idea would be to make two shadows, one brighter and one darker than the text, and make the text the same colour as the background. Then offset the lighter colour up and left of the text, and the darker colour to the right and below the text. This will give you a nice bas relief effect.

Text effects are cheap in processing time and easy to create, as long as you are creative with the way you display them. You can also animate the effects with a bit of judicious coding – for example, you could fade up the bas relief effect to make it look as though the text is emerging from the surface. I'd be interested to see any effects like this that you come up with.



Write stuff

If you have an Amos question, or a routine you'd like to share with the world, then please write to Phil South, Amos Column, Amiga Computing, Media House, Adlington Park, Macclesfield SK10 4NP. Please send routines on an Amiga disk with notes on how the program works on paper. Make the routines short (use these routines as a guide) and reasonably independent of any graphics and sound support files, although I will make provision for these if necessary.


ONLY £1.25
all-new mag of the top telly show!
Issue 4 April Edition £1.25
IDG MEDIA
9 771355 173022 04
Movies games Videos
More stars!
OUT NOW
WIN!
Six times your weight in videos! Freddy Krueger's jacket! Shawshank Redemption and Andre gear! And loads more!
POSTERS
Make My Day!
massive
babe special!
Babe-licious, babe-lightful and babe-lovely!
I'll be back on page 16 of this rather splendid mag. See the review of True Lies on video. Be amazed at the quality of the words and, in fact, the pictures too!
Phew!
Those 2 Girls kick off the all-new MGV – join them for a rollercoaster ride through the world of entertainment!
Wow!
INSIDE: MGV's Very own Oscar winners for last year, How to make a blockbusting movie, Interview with Kryten (Red Dwarf) and Dennis Hopper (Speed

Classy coding tells all...

This month's theme, in a nutshell, is about writing understandable code, and while most programmers will doubtless have their own ideas on what constitutes an easy-to-read program, I thought it might be useful to recap on the conventions I use. One thing that is obviously helpful is the use of understandable names for variables and I tend to use lowercase names, adding underscore characters to improve readability.

For example, an ARexx statement which reads:

```
exit_flag=TRUE        /* set exit flag - user */
  /* has decided to quit */
```

is, in my mind, much preferred to something like:

```
ef=1
```

With function names I capitalise the first letter of each part of the function name – CalculateAverage(), GetResponse() and so on. ARexx itself doesn't care about the capitalisation (function names are all treated as upper case anyway) but the above mentioned arrangement does seem to aid readability.

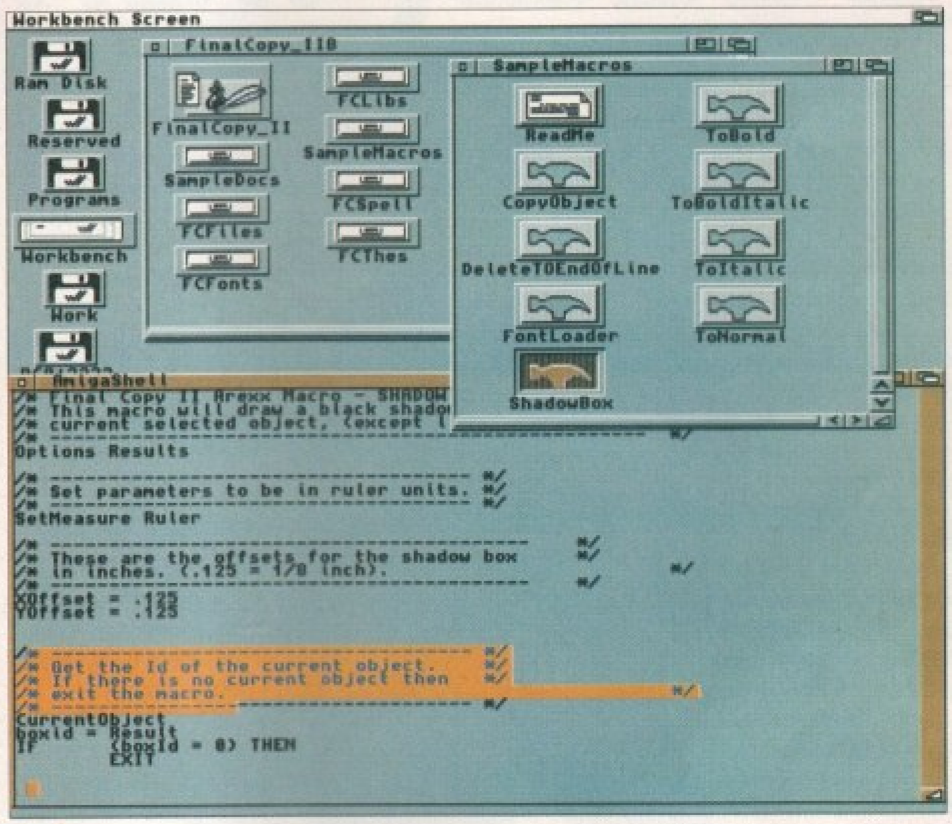
Above all make sure the name tells you something about what the function does – it may seem all very clever at the time to create a function called HaveANiceDay() but six months later it's likely to be you who's sitting there wondering what on earth it does!

ARexx variables are effectively 'typeless' so you don't need to declare variables as holding numbers, strings and so on. Despite this, I believe it is actually very useful to be able to imply something about the type of data held in a variable from its name.

You may have noticed that I often add a $ suffix to ARexx variables which are specifically used to hold text strings. I might, for example, use name$ and address$ to collect name and address strings from a user. If, on the other hand, I knew that the user input was going to be a number then I'd use variable names like value, age, x, or n.

I should point out that in this case these 'pseudo type' arrangements are not a common ARexx convention and internally, ARexx cares little about the types of values placed into a variable. Nevertheless the convention has served me well and it is one I recommend.

With some advanced applications it is also occasionally useful to adopt additional conventions. Prefixing global variables with the character g_ and suffixing pointer variables using _p can help tell you something about the data stored in the variable.



A little extra care when writing ARexx scripts can produce dividends in the long run!

Another 'rule of thumb' concerns avoiding the use of absolute constants within the bulk of your program code. Unfortunately, ARexx doesn't provide much direct help in this area but 'pseudo constant' values can still be set up simply by loading values into variables (which are subsequently never changed). My preference is to use uppercase names for constant values like this:

```
ESCAPE = '1b'x
```

By getting into the habit of placing such definitions near the start of a program, you will always know where to look for them. The separation also makes the values easy to change and because symbolic names rather than the underlying definitions themselves are used, the program automatically becomes easier to understand.

This 'trick' is especially useful when dealing with control character sequences (this of course was what last month's instalment was all about) but the ideas can also be applied in other areas as well. There is, for instance, a good case, particularly with larger scripts, for eliminating explicit text messages from the bulk of your code. If, for example, you set up this initial error message definition:

```
WRONG_VALUE = 'sorry   this value is not
       correct'
```

then within the main sections of the program the appropriate error message can be displayed using:

```
say WRONG_VALUE
```

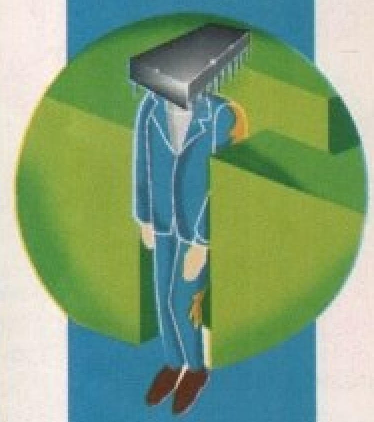
Equally important is the fact that the message, which may actually get used in a number of different code areas of the script, is now defined in a single place. This ensures that any changes to the initial definition results in those modifications automatically being used throughout the program!

Fair comment

All ARexx programs have to start with a comment line so there's a good chance there will, at least, be a program name at the start of your scripts. But why stop there – additional comments can make a world of difference to understanding a program.

Don't make the mistake, incidentally, of thinking that comments are just for the benefit of other users and that you understand your code well enough not to need additional remarks. You may understand your code when you write it, but it's amazing how code tricks, which seemed perfectly obvious at the time they were written, appear to loose their 'inherent obviousness' as time goes on.

You should not get carried away to the point where you impose unreasonable numbers of restrictions on either yourself or anyone else who has to read your code. The aim is to adopt a set of coding guidelines which help and are easily usable, and luckily, for the most part at least, all that's needed is common-sense coupled to a consistent methodical approach!



If you have trouble understanding ARexx code you've written months or years ago, these guide lines from Paul Overaa could make your coding life easier

Hooray for Hollywood

Phil South looks at the way you can preview upcoming movies on the Net before they even come out



People who don't use comms are often mystified by what you can get on the Internet and why you should want to use it. The common comment is that you must be into computers to want to use one, or need to know about them to use the Internet. Both comments are true in one sense, but nonsense in another.

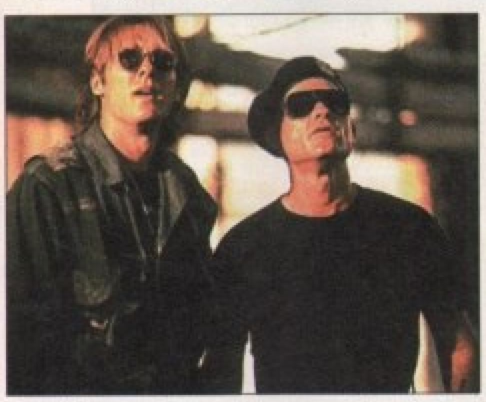
You don't have to like computers to use them for fun and you don't have to know how a game works to enjoy playing it. By the same token, if you are into something like films, which I am, then you still have something on the Internet, Delphi and CompuServe which is going to help you with your interest.

For a start there's the big daddy of them all, the Cardiff Movie Database. This is a place where you can find out almost anything you want to know about movies. You can do a word search for a film title, actor, actress, director or cinematographer, or indeed any number of film people, and the results will be displayed on your screen. Not only that – once you have an item on the screen, you can click on the names and get a list of the other films that person was involved in.

This is an invaluable cross referencing tool, even if you aren't Barry Norman (or perhaps you are, and if you are then why shouldn't you be?) If you're just into films then this is better than hundreds of film books crammed together.

What's more, if the entry for a film isn't in there and you eventually find out what it is, you can put it in, thereby expanding the database. Every time you log into it there will be more and more titles for you to read, and the information is bang up to date.

I typed in Hal Hartley, a US film maker who makes quirky low-budget films, and I got all of his films up including the one which was on Channel 4 a few weeks ago, Simple Men, plus Amateur, which is currently on release as we speak and playing to packed houses all over the country.



To use the Cardiff Movie Database, simply set your Web browser to the URL:

```
http://www.cm.cf.ac.uk/Movies/
```

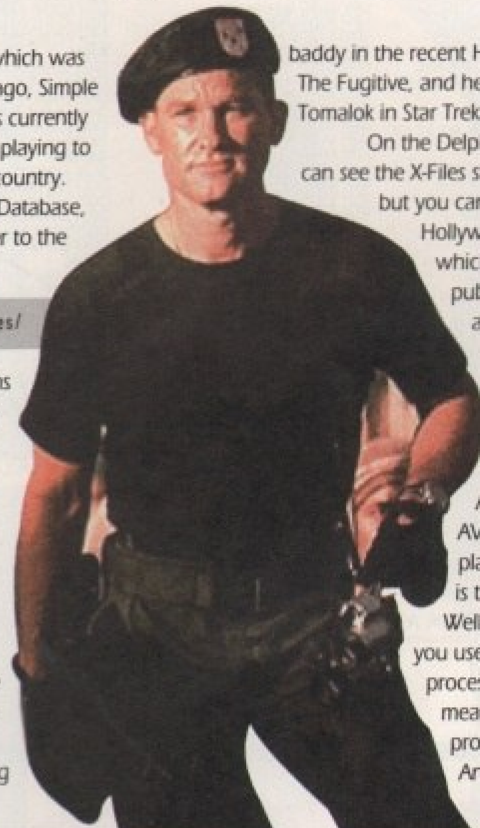
and you're in. If you like films you have got to add this to your menu of favourite places.

I've mentioned the Babylon 5 Lurker's Guide before, but I'll skim that again in case anyone wasn't paying attention. The series has just started again on UK TV, so if you're a fan of this series you can get the definitive on-line guide to the show by setting your browser to:

```
http://www.hyperion.com/lurk/lurker.html
```

allowing you access to the files on the series, pictures from the FTP site and profiles on all the actors. If you've ever been watching the program and thought 'who is that under all that make-up, the voice is familiar,' then this is the place to find out.

For example, Andreas Katsulas, who plays Ambassador G'kar, also plays the one armed baddy in the recent Harrison Ford version of The Fugitive, and he is also the Romulan Tomalok in Star Trek: The Next Generation.



On the Delphi Internet system you can see the X-Files stuff as I've said before, but you can also go to the Hollywood On-Line pages which contain the excellent publicity photos and animations from new films released in the US. This often means you can see a picture from a new film long before it ever premieres over here.

Also, you can download AVI files from the system, playable on PC. What good is that to me you may ask? Well, not too much unless you use the MainActor animation processor program, which means you can translate the program from an AVI into an Anim file. The pictures and sound samples are in GIF or Jpeg format, and the sounds are in WAV format, easily convertible into Amiga sounds using sound converters like Sound Exchange – which is available on CIX.

At the moment I'm busy downloading some files from Stargate, a film I've just seen, and now I have one of the best scenes from the selection sitting on my Workbench.

The Hollywood On-Line pages are also to be found on CompuServe, if you can afford to download them that is. I know the costs for CompuServe have gone down in recent months, but it's still one of the most expensive ways to get on-line. They do have a number of other movie resources but you mainly get Celebrity Pictures which can be accessed by typing: GO ARCHIVE and go to Library 4, Film TV Stage and Radio.



Contact point

If you have any BBSs you'd like to tell me about, or there's anything you'd like to find on the Internet but can't, please feel free to ask me. You can reach me by e-mail at these locations:

Internet	phil@snouty.demon.co.uk
CIX	snouty
The Direct Connection	snouty
CompuServe	100102,1500
Delphi	snouty@delphi.com

or by post to: Phil South, Comms Section, Amiga Computing, Media House, Adlington Park, Macclesfield SK10 4NP.

A smoother finish all round



Gary Whiteley turns his attention to explaining anti-aliasing, making your images better lookimg

Back in the late 1980s, when I was using an Amiga 1000, I got tired of the jagged-edged images DPaint was producing and decided there must be a way to make things better looking. After all, expensive TV graphics machines could make nice-looking text and images, so why couldn't my costly A1000 be coaxed into doing similar things?

I'd read about something called anti-aliasing in the professional TV broadcasting and graphics journals of the time and decided this was what I needed. Unfortunately, none of the Amiga software then available was able to do automatic anti-aliasing, so I had to devise my own, hand-crafted, techniques.

My research indicated that anti-aliasing is a method used to smooth out the jagged appearance produced, where the edges of contrasting coloured pixels clash – a good example being the visibly stepped edges of a white diagonal on a black background. Such blockiness didn't look professional enough for me, so I started adding intermediate colours by hand in order to smooth out the jaggies.

As mentioned in last month's column, I work almost exclusively in Hi-res interlace – something which often pushed my A1000 (expanded to 2Mb!) to its limits. Even so, I persevered using carefully chosen 16-colour palettes which would allow me to design static texts and logos, while still being able to provide the intermediate colours necessary for anti-aliasing.

Of course AGA and graphics card owners won't have such restrictive palette problems, but there are still plenty of Amiga owners who don't have that luxury. To them I say that if you do some judicious planning, there's lots your Amiga can do without needing a huge palette range.

Anti-aliasing works by fooling the eye into seeing a smooth graduation between strongly contrasting colours. Often just a single, carefully-chosen intermediate colour will suffice, though better results will be obtained using two or three colours which blend successively between the colours to be anti-aliased.

However, anti-aliasing at low resolutions will not be as successful because it is much easier to see the larger pixels, so the intermediary pixels won't be as misleading to the eye and the illusion (for that is what anti-aliasing is) is unlikely to be convincing.



Anti-aliasing smooths out the jagged edges of bitmapped graphics by applying intermediate tones to graduate between two strongly contrasting colours. A normal bitmapped font is shown at the top, with its anti-aliased equivalent underneath

The hardest part is knowing where to place the intermediate colours to the best effect, but as usual practice makes perfect. Don't think that only images with restricted palettes will benefit from anti-aliasing – even 24-bit images look better with non-jagged edges as they appear to more closely resemble what we see in the real world. In the end it's all down to looks, and if it looks right, it is right.

Nowadays, all good 2D and 3D graphics programs offer some form of anti-aliasing, whether automatic or through manual operations such as smoothing. However, if you're using text in a 2D program there could be a better way – make anti-aliased versions of fonts by using either Zen's AntiA to turn Compugraphic and Amiga bitmap fonts into multicoloured Colorfonts, or A2A (available from Alternative Image) to turn Type 1 Postscript fonts into Amiga Colorfonts.

CALCULATIONS

Programs such as AntiA and A2A, as well as 2D paint and 3D rendering programs use calculations to determine the optimum intermediary colours, so take much of the hard work out of anti-aliasing.

If you're applying anti-aliasing by hand to a 2D animated sequence such as a flying logo, there's little point in cleaning up every frame, as each stays on screen for so little time that the eye won't be able to tell whether they have the jaggies or not. Fixing up any frames where the logo remains static for any period of time will suffice.

Of course, there isn't always a need for anti-aliasing, and in the long run it greatly depends on what you (or your clients) are happy with. If you produce 3D images and animations you are probably already aware how much extra time can be added to your rendering by turning on any anti-aliasing options.

If you use Imagine there's often no need to turn the anti-aliasing settings all the way up to maximum unless you require perfect stills, especially when producing sequences for animation. With Lightwave it is usually acceptable to stick to the Low anti-aliasing setting and often quite permissible to reduce the level of Adaptive Sampling from its default setting of 8 to 48, 68 or even more.

Worth it in the end

Experimentation with anti-aliasing settings will usually pay dividends and you'll find that you can often increase your rendering speeds, so achieving better throughput without significant quality loss. Of course, you could always splash out a few thousand on a blindingly fast accelerator or perhaps a Raptor (for Lightwave), but most of us don't have this kind of money to throw around, so any increase in speed while keeping quality levels up is going to be viewed as a happy compromise.

So get out your paint or 3D program, experiment with anti-aliasing and then honestly ask yourself if you could ever go back to those unsightly jaggies ever again!

Contact

Gary Whiteley can be e-mailed as drgaz@cix.compulink.co.uk. He also has a book on Amiga DTV available - "Amiga Desktop Video" from Future Publishing.

Link Two Amiga Computers
Flexi Link/Software

* Access other computers hard drive/floppy drives.
* **Use CLI commands**
* Use normal utilities across link.
* **Full software Autoconfiguration.**
* Menu driven software.
* **Works in full multitasking environment.**
* Link.library – for developers.
* **Includes parallel cable.**
* Includes easy to follow manual.

At an Amazing price of £49.95 including postage + package.
Make cheques/Postal orders made payable to Mr Sturgess.
1 Oakcroft Close, St. Leonards Park Gloucester, GL4 9NU

RADAR PD

Public Domain from 57p a disk

10,000 disks available – 7 days a week

Utilities, Music Utilities, Anims, Music, Demos, FF, Scope, Jam, Games, Assassins and so much more

2 Catalogue disks for £1.00 inc P&P

Refundable on first order

Cheques/P.O.s to:-
69 LONDON ROAD
BENFLEET
ESSEX SS7 5TG

Prices: 1-20 = 70p
21-50 = 64p, 50+ = 57p

TEL 01268 565564



FAST AMIGA REPAIRS

FAULTY TROUBLESOME COMPUTER??

SEND OR DELIVER TO THE EXPERTS FOR FAST RELIABLE REPAIR OF YOUR BELOVED AMIGA 500

ONLY £44.00 INC,*

DRIVE OR KEYBOARD REPLACEMENT + £10

WE ALSO REPAIR TO COMPONENT LEVEL
A600, 1200, 1500, 2000, 3000 + 4000
★ FREE QUOTATION ★

FREE GIFT WITH EVERY REPAIR PLEASE TICK BOX

- MOUSE MAT ❑
- MOUSE HOLDER ❑
- DISK CLEANING KIT ❑
- ADD £5 REPLACE MOUSE ❑
- ADD £5 JOYSTICK SEGA STYLE ❑

BARGAIN HARDWARE
Fitted 85/500 Mb............Call

EXCHANGE SERVICE

MODULATORS	£19.50
PSU	£19.50
DISK DRIVES	£25.50
KEYBOARDS	£25.50

* COLLECTION AVAILABLE ANYWHERE IN THE UK.

144 TANNER STREET, TOWER BRIDGE, LONDON SE1 2HG. TEL: 071 252 3553

HiQ Limited

Tel +44 (0)81 909 2092 Fax +44 (0)81 909 3885

!! A1200 Hard Drive Sale !!

HiQ are offering Bare Hard Drives at unbeatable prices in 2.5" and 3.5" IDE and SCSI.
Please call for latest prices on these and other drives by phone or fax.

420mb - £159.95

A1200 Cable Pack £20, A1200 200w Power and Cable Pack £70, **P&P £6**

!!! Free fitting for all personal callers !!!



Powerstation Features:-

1. 200 Watt Power supply for SCSI drives and Amiga A1200/A600 computer.
2. Up to 5 SCSI drives bays.
3. Built in stereo amplified speakers with external output and volume, bass, treble and balance controls.
4. Good looking and strong construction.
5. Ideal monitor stand and cable tidy.
6. Holds CDRom, Syquest and any other SCSI or SCSI 2 drive units.

Available from stock for only ***£129.95*** + P&P

CDROM Option
Powerstation + Dual Speed CDRom + Squirrel.
ONLY ***£329.95*** + P&P

Need Zorro Slots? Sorry, but we may have a better idea. Just give us a call!



All Prices include Vat

HiQ Ltd, 176 Kenton Lane, Harrow, Middx, HA3 8SU.

Fax +44 (0)81 909 3885 **Tel +44 (0)81 909 2092**

Blast from the past

Paul Overaa takes that promised look at Steinberg's Pro 24 Amiga sequencer
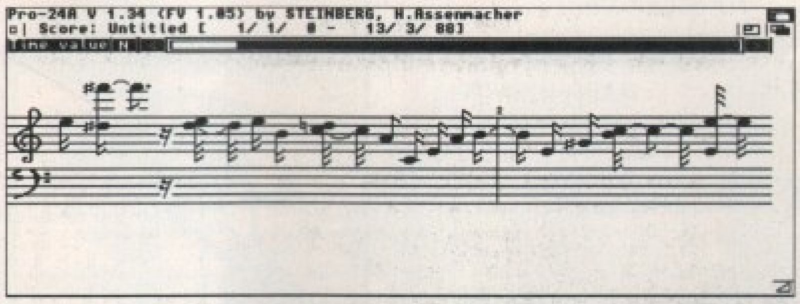
A little over five years ago Steinberg released a version of their Pro 24 sequencer for the Amiga. Despite the fact that the Amiga was badly in need of additional good quality music software, Pro 24 Amiga failed to have the same impact of the Atari ST version.

This was little or nothing to do with the software itself, but simply a reflection that relatively few people were using Amigas for sequencing at that time. In recent years, interest in Amiga Midi sequencing has grown considerably and, since many of you will have missed this sequencer first time around, I thought some up-to-date details of the Steinberg offering might be useful.

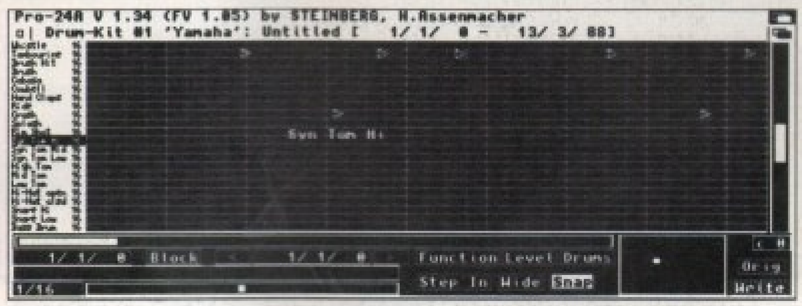
Pro 24 Amiga is actually a re-write, rather than a direct port, of the original Atari ST program. It is supplied on a single disk and, as expected, comes with a 'Steinberg key' – i.e. a dongle – that must be present in the second joystick port at all times. The manual is very well written and has good introductory and tutorial material, but the best news is that despite some fairly detailed accounts in later chapters, the manual has been kept to a reasonable size so it doesn't take forever and a day to read.

The top half of the main Pro 24 Amiga display contains the track indicators, track selection, record pointer icons and the activity bars for each of the 24 tracks. Needless to say, the set of tape-transport controls of Pro 24 Amiga look much the same as those found on other sequencers, with each track having a set of playback parameters that determine whether data is transposed, quantized, delayed, filtered or muted.

As well as a tape mode there is a sequence mode which allows you to create links for repeating sections and so on. A 'master track', quite separate from the 24 normal tracks, is also available and is used for storing tempo changes, time signatures and other global characteristics.



Score display of track data



The Pro 24's drum map editor is particularly useful

As with most 'heavyweight' sequencers, there are simply far too many facilities to be able to mention them all. Pro 24 Amiga supports internal and external clocks, MTC and SMPTE, and offers a range of metronome/count-in facilities including the sending of user-definable Midi notes.

When editing, a track survey window lets you see a visual picture of the data present, while a track content display provides detailed event-by-event info. Location markers make it possible to mark out specific areas of a sequence and, in conjunction with the editing facilities, this forms an easy-to-use yet powerful arrangement.

RIGHT TRACK

A 'subtrack mode' enables incoming data to be split and redirected to specific tracks and of course all the usual things like channel reassignment on output, automatic punch-in and punch-out etc. are provided.

Pro 24 Amiga, like its original ST counterpart, has its own grid-style drum editor, provides some comprehensive Sysex facilities, supports Midi file load/save options and (surprisingly) can even handle SMUS format. There are also plenty of nice touches like a score editor, alternate channel echo effects, and powerful 'logical edit' facilities which allow all sorts of event translation operations to be carried out.

It's possible to split multi-channel tracks and re-direct the data to alternative tracks on a channel-by-channel basis. You can also remove 'empties' and doubles (duplicate Midi events which you sometimes get when combining sequences), and there's a whole range of cut/expand, pattern split, track mixing, tempo change and step-input options in addition to the usual types of copy/move/delete block-oriented edit facilities. There's even a 'Midi-Monitor window which provides details of Midi events as they arrive.

Losing its way

Although there is almost nothing that cannot be done with this sequencer, I'd be less than honest if I didn't mention that I think the package is now showing its age. Amiga software, like that of all other machines, has moved forward a long way in five years.

There's no doubt at all that Steinberg's Pro 24 Amiga sequencer is extremely powerful, and would clearly be ideal for any user that has had previous experience with Pro 24 on the Atari ST. For everyone else though I'm not so sure, and I suspect that what is really needed is a revamp to bring the package up-to-date.



Pro 24 Amiga's main display



SYSTEM ESSENTIALS

RED = Essential **BLACK** = Recommended

1 Mb RAM

The bottom line

Product: Pro 24 Amiga
Price: £239 inc.VAT
Supplier: Harman Audio
Tel: 0181 207 5050

Ease of use	**8**
Implementation	**7**
Value for money	**6**
Overall	**7**

AMIGA REPAIRS

FIXED PRICE ONLY £42.99 incl. (A500/+, A600 ONLY)

- ★ Price includes PARTS, LABOUR, DELIVERY, VAT
- ★ 90 day warranty on all repairs
- ★ 24 hour turn-around on most repairs
- ★ All upgrades purchased from us fitted free with repair
- ★ Includes FULL DIAGNOSTICS, SERVICE AND SOAK test
- ★ If drive or keyboard need replacing add £10

Est. 13 Years

AMIGA A1200 Repairs only £52.99 – Fully Inclusive

SPECIAL OFFERS

A500 Internal Drive	£36.20	A600/1200 Internal Drive	£38.90
A500 /600/1200 PSU	£28.50	A500 Keyboard (UK)	£42.10
Fatter Agnus 8372A	£24.30	A500 CIA	£15.00
Super-Denise	£18.40	A520 Xcharige Modulator	£18.00

CHIPS

8371 Agnus (A500)	£12.60
8372A 1 Meg Agnus	£24.30
8372 2 Meg Agnus	£24.30
8374 Alice (A1200)	£32.70
8362 Denise (A500)	£9.60
8373 Super Denise	£18.40
5719 Gary	£7.60
8520 CIA (A500/+)	£15.00
8520 CIA (A600/1200)	£15.00
8364 Paula (A500/+)	£12.34

CHIPS

Kickstart 1.2	£4.20
Kickstart 1.3	£12.80
Kickstart 2.04	£22.40
Kickstart 2.05	£29.90
Kickstart 3 (high)	£25.00
Kickstart 3 (low)	£25.00
Rom Sharer	£15.00
NEW Modulators	£29.50

All spares are factory NEW and genuine Commodore parts. All come with 12 months warranty (Except chips).

HARD DRIVES

Quality 2.5 inch Int HD
Suited for A600 & A1200

60 Mbyte	£120.00
80 Mbyte	£125.00
120 Mbyte	£150.00
170 Mbyte	£195.00
250 Mbyte	£249.00

All drives complete with cable, fitting instructions installation software and 12 months warranty

Add £1.00 P&P on chips, £2.50 P&P on drives & PSUs. We reserve the right to refuse repairs.

ATTENTION ALL DEALERS
Our company offer the most competitive dealer repair service on all home computers. Credit facility available. SEND FOR FREE INFORMATION PACK TODAY.

Service HOTLINE (0533) 470059
DART Computer Services
105 London Road
LEICESTER LE2 0PF

The Guild of Master Craftsmen

DART Computer Services
A division of D.A. Computers Ltd

HORNESOFT P.D.

(Dept AMC) 23 Stanwell Close, Wincobank, Sheffield S9 1PZ. Tel: (0114) 249 2950

EST 1990
OVER 12,500 DISKS AVAILABLE

Key: (2) No in brackets = No of disks (HD) = Hard Drive required

ALL DISKS ARE 89p EACH

Postage: UK 70p; Europe +20p a disk; Rest of World +35p a disk

CHOOSE 1 FREE DISK FOR EVERY 10 DISKS YOU PURCHASE

SPECIAL PD PACKS

100 PD GAMES PACK	£6.00
CRUNCHERS PACK	£1.40
UFO TEXT PACK	£4.20
USEFUL UTILS PACK	£1.40
GIF BEAUTIES PACK (AGA ONLY)	£12.60
100 TOP DEMOS (ANY AMIGA)	£8.00
COPIERS PACK	£1.40
VIRUS KILLERS PACK	£1.40
HARD DRIVE UTILS PACK	£2.10
DISK UTILS PACK	£1.40

All packs exclude postage – Order packs with PD order and pay 1 lot of postage

AGA DEMOS
Big Time Sensual (2)
Killing Zone (4)
Prey (2)
Switchback (2)
Ninja
Actung
Iliad (4)
Shakka Lakka
Apex
Roots
Virtual Dreams (3) (HD)
Dove Demo (2)
Rumble Bubble
Dotsy
My Mamma's a Vampire (2)
Twisted (4)
Olympe
Indigo (2)

DEMOS
Nexus 7
Mental Slavery
World of Ascii
Complex Seduction
Ozone Swamp Thing
Music Duel (3)
Spaceballs 9 Fingers (2)

GAMES
Dangermouse
High Octane Turbo
Green 5
Blackjack
Captain Bonus
18th Hole Golf (2)
Deluxe Galaga V2.4
Dynamite Warriors 2
Blackdawn 2
Mr Men Olympics (2)
Missiles Over Xenon (2)
Antwars V1.9
Zaxxon
Tomcat (6) (HD)
Kellogs Land
Silly Soccer
Starbase 13 (2)
Arcade Classics
Startrek TNG Game
Poker Mania
Pucman Worlds
Pacman 3D
800 Game Solutions
Cheats Lister V3.6 (2)
Digital Tetris
Flaming Engines
Indycar Challenge
Manga Hot Numbers
Beavis and Butthead Game
Starwoids (2)
Spelltris
Evils Doom
Art of Breaking Heads (6)

A1200 GAMES
Klondike 3 (4) (HD)
Viper
Madfighters 2 (3)
Megaball 3
Rockets 2
Zombie Apocalypse 2
Kiss the Canvas
Evil Insects
Giger Tetris
Cybertech Corp (2)
Boron
Fears AGA

A1200 UTILS
Videotracker 2 AGA
A1200 HD Prep Disk
Action Replay 4 & 5 (2)
Magic WB 1.26 (2) (HD)
Magic WB Extras (2)
Magic WB Backdrops (3)
Zxam Speccy Em V1.3
Relokick 1.4A
A1200 Games Fix Disk
Movieguide 2.4 (2) (HD)

A1200 SLIDES
Bodyshop 6 (2)
Bodyshop 7 (2)
Bodyshop 8 (2)
Startrek TNG Slides (2)
Cindy Vol 1 (2)
Cindy Vol 2 (2)
Cindy '94 (3)
Claudia Schiffer (3)
Erika Eleniak
Big Girls
Red Dwarf (2)
Fit Chicks 2 (2)
Fit Chicks 3 (2)

UTILS
Text Engine V4.1
Disk Salvage V2.31
PC Task V2.3
Amiga Dos Tutorial
Lockpick 2
Copiers Unlimited
Protracker V3.15
Lion King Clipart (3)
National Lottery Winner V2
Pro Titler
Term V4.2 (3)
Spectrum Em V2
Minimorph V1.1D
Final Writer Patch
EPU Hard Drive Stacker V1.70
Sonic Drum Kit 2
Icon Toolbox
Image Studio V1.21
Blackboard V1
Icon Archive (3)
Databases Comp
Virus Killers Comp
Virus Workshop V4.7
Menumaster V3
HD Games Installer V2 (HD)
600 Business Letters
Citizen Print Manager
Printer Drivers Disk
F1 GP Editor V2.04
Imagine Tips & Tricks
Imagine Buddy System (2)
Videotracker V2
Main Actor V1.55
Graphics Utils Comp (2)
A600 HD Installer
W/B Utils Disk
Office Utils

EDUCATIONAL
ASI Back to School (3)
Mr Men Pack
G.C.S.E. Maths
Kids Disks (2)
Startrek Guide (6) (HD)

MAKE ALL PAYMENT PAYABLE TO: HORNESOFT PD
To get a catalogue disk ask for one FREE with first order. Or send S.A.E. + blank disk for one. We stock the lot. Fred Fish 1 to 1,000, PD Soft utils 1 to 1,402, 17-Bit, Scope, TBag, Jam, LSD utils etc...over 12,500 disks.
SAME DAY DESPATCH ON ALL ORDERS. We treat customers as friends!!

PD DISKS AT 30p EACH
See catalogue for more info!!

CyberSystems

VLab motion system **£999**
Full non linear video editing system fades/wips/effects all on board. The most competitive and the most versatile motion board available. Import your frames from Lightwave, Imagine, Real 3D and record to video live. Supports SVHS Format.

Toccata **£350**
Full 16-Bit Audio Card. Record and playback on to Video. 16-Bit sampler.

Vlaby/c **£345**
Real time SVHS Digitiser Board.

AirLink **£69**
Control your Video/TV/HiFi, or any Infra Red controlled device can be controlled via the keyboard or via Arexx. Create your own remote in your favourite paint package run it on the Workbench and be in control from your Amiga.

2 GB Barracuda	£990
1 GB Barracuda	£660
230 MB Fujitsu Magneto Optical	£749
Box of Five 230 MB MO Disks	£185
Lightwave Courses	Call for details
Humanoid	Call for details
Vista Pro 3.0	£25
LightWave 3.5	£429
XCad	£34

3D Modelling Service
24-Bit Colour Scanning
A3 Plotting Service

PHONE: 01843 292 150. FAX: 01843 292 150
WANTED: SECOND HAND AMIGA 3000

For All your PD needs in **Scotland**

MG's PD

(AC), The Old Farmhouse, Rosefield, Balbeggie, Perth, PH2 6AT
Tel: 01821 650488

Fast, Friendly, Efficient Service. Orders returned same day 1st class

Utilities
Ultimate Icon Disk
Print A Card
Invoice Maker
Ultimate Disk Creator
Forms Really Unlimited
Last Will & Testament
Chess Tutor
Understanding Amos
EasyCalc Spreadsheet
Printer Utilities
Digital Address Book
Easy Print
Pools Dividend Winner
Auto StereoGram
Cop the lot (National lottery prediction)
D.Paint Buddy System (2)
Imagine Buddy System (2)
Desktop Magic D
Virus Workshop V4.3
Psycho Imagine Objects
Babylon 5 Objects
Hardware Projects
Football Icons
Games H/D Installer
Loans & Accounts

Choose 1 disk FREE with each 10 you buy

Games
Hell Zone (shoot-em-up)
Battle Cars 2 (3D driving)
Balders Grove (Brilliant)
Road to Hell (racing)
Oblivion (great shoot-em-up)
Megaball
Scrabble (PD version)
Chess Games
Dragon Tiles (puzzler)
Batman (PD shoot-em-up)
Tetris Pro
Green 5 (brilliant)
Global Thermo War
Scorched Tanks (excellent)
Bullrun (war game)
Shepherd (Populous type)
G-Force 2 (shoot-em-up)
Puzz Word
Space Invasion 2
Megablock 2
Antwars (2 disks)
Knightwoode
Fruit Mania
Indy Car Challenge
Kellogs Land
Spelltris
Beavis & Butthead

1200 Only
Hoi's AGA Remix (Game)
The Final Chapter (Demo) (over 18s only) (3 disks)
Megaball AGA (Great game)
Viewtek v2.0 (AGA pic viewer)
Planet Groove (Classic Demo)
Window Blender (more fractals)
Mad Fighters (AGA beat-em-up)
Andy's W/B3 Utilities
A1200 W/Bench Hacks
W/Bench 3.0 Backgrounds
Bazza & Runt (platformer)
Zombie Apocalypse II
Cybertex CorpsAGA (2 disks)
Evil Insects (shoot-em-up)
Lottery Winner AGA
Klondike 2 Deluxe (3)
Trick or Treat
Rocketz AGA
Relokick 1.4
AGA blitz blanker
Video Tracker AGA

38 disks containing hundreds of Speccy games. Full listing on catalogue disk.

Music
Med v3.2
Artworx Pro Samples
20 Powerpacked Mods
Heavy Metal Mods
Pro Samples 2
Techno Mania
Music Madness
Club Mix 3
Legalise it (2)
No Brain No Pain
Dance Trash (2)

Demos
Mayday (techno)
Spaced Out 2
Retina Euro (rave)
Jesus on Cheese
9 Fingers (dance demo)
Wind it Up
Sequential (nice GFX)
Pha-Q (mate)
Beyond Belief AGA
Subliminal XTC AGA (2)
Mind Riot
Industrial Fudge AGA
Runaway Brain AGA
I Feel Good AGA
Some Justice 94 AGA

Send 3 x 1st class stamps for catalogue disk listing over 6000 titles with FREE D-Copy, FREE Game and FREE Up-date

Fish Disks 1 to 1000	Assassins 1 to 220	17 Bit Disks 1 to 3351+	All disks 90p p+p 70p per order	Please make cheques/POs payable to M. Grieve

Turning Japanese



Frank Nord takes a look at the intricacies of DTP origami

Origami? In a DTP column? Well, only in the loosest sense of the word. I'm talking about folded paper – two-fold and three-fold brochures, greetings cards, paper aeroplanes and so on. They might seem like tough tasks when you first look at them, but they can actually be quite easy and a lot of fun to do. The only thing they really rely on is the ability to rotate graphics and text. So your PageStream, ProPage, Wordworth 3.1 and Final Writer will be fine, but things like PageSetter or KindWords aren't suitable.

The very first thing to bear in mind is that you can't do this solely on the computer (well, not unless you have a brain the size of a planet). So get out a spare piece of A4 and have a good look at it.

What sort of printer do you have? If it's one that relies on tractor or friction feed you know you won't be able to print on the bottom inch or so of the paper. If it's a laser, you won't be able to print right up to the side edges. Know the limitations you are stuck with and don't jump straight into your design without considering these elements of space.

MEASUREMENTS

The next thing you will have to do is get your ruler out. Fold the paper so that it resembles the final shape you want, whether it be the complex folds of a paper aeroplane or simply folded into quarters for a birthday card. Then measure where the crease marks are.

The best way of assuring accuracy is to draw your fold lines in your DTP package and then adjust them numerically, rather than by eye. For lines at an angle, you might find it easier to use a protractor to calculate the angle from the edge of the page and enter it this way, instead of trying to fix start and end points in space.

Once you have marked up your page with lines, you are then ready to proceed onto the design side of things. As a birthday card is the simplest example, we will have a look at that first. Your page should be divided into four quarters. Looking at the piece of paper you have folded you will see you need to use the top-left hand corner for the inside of the card and the bottom right-hand corner for the cover.

The inside of the card has to be upside-down, so your best bet is to create your greeting in that section of the page (the right way up), and once you are satisfied that it fits, looks nice, and is going to print, you can then select all the items in the section, and group them together if necessary, before rotating the whole bunch through 180 degrees. A three-fold brochure is somewhat more difficult to plan as you will almost certainly want to print on both sides of the paper. You will need two pages, both divided into three in the same places (if you have a master page facility in the program you are using, I would suggest you use that).

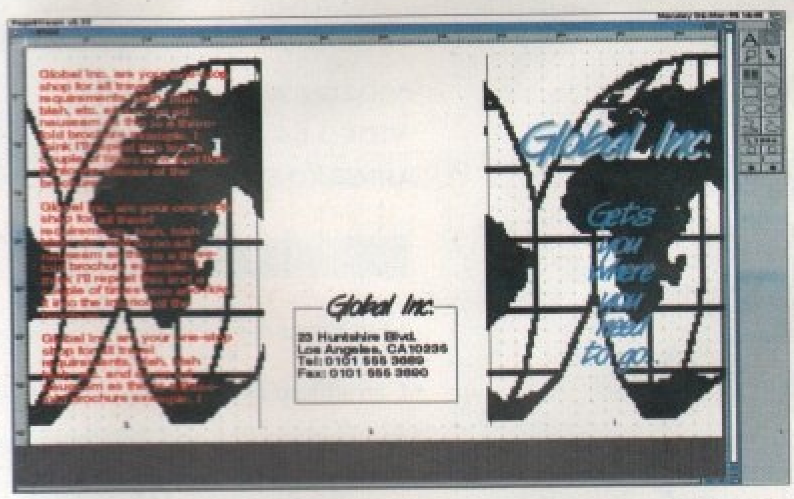
Then you will need to decide which flap will show on the outside, whether you want a continuation of a graphic from one half of the brochure to the other, and if you are going to need to print on the back of the middle section. For ease of use, you will probably find it less confusing to sketch out your idea onto your sheet of A4 first and number the sections from one to six. Repeat this numbering in your DTP program – you can always get rid of them once the design is complete.

Imagine a three-fold brochure folded up in front of you. The section you can see first (the first flap) is called section one, the next flap is section two, then the three spread sections are three, four and five, leaving the middle panel on the back of the brochure as section six.

One of the nicest examples of continuity in a three-fold brochure is where there is a picture on the cover (section 1) which, when opened, reveals the same picture on the second flap, but perhaps with some more text on it (section 2), which also continues onto the inside of the first section (section 3). When you open the second flap, the entire inside of the brochure is revealed to show the complete picture.



This is the inside of our three-fold brochure (sections three, four and five)



This is the outside of our three-fold brochure (sections two, six and one)

Falling into place

The illustrations on this page show the two pages I have done in PageStream 2.2 for this sort of brochure. The quality of the globe seems shoddy, but as it is an EPS graphic it will print okay. This type of three-fold brochure takes a lot more thought, and in this instance was achieved using three copies of the clip: one on sections three, four and five, and one on section one – moved so this section had the middle of the graphic in it. The remainder of the graphic falls off the right-hand side of the page and also covers section six.

The last clip is used on section two, again with the middle part of the graphic over it, and the left-hand portion of the graphic has fallen off the left-hand side of the page and the other third is covering section six. This is why I have covered the whole of section six with a white borderless box to cover up the overlapping images.

Play around with these concepts and try your hand at the paper aeroplane idea. The techniques I have explained might prove more problematic with one of the word publisher programs, but with a bit of ingenuity, you should be able to cope.

LOW PRICES

IDE/SCSI 2.5"/3.5" HD

Our high quality 2.5"/3.5" IDE/SCSI hard drives come with a one year warranty. The 2.5" HD's come with cable & manual.

80MB 2.5" IDE **£109**
120MB 2.5" IDE **£139**
170MB 2.5" IDE **£179**
260MB 2.5" IDE **£219**
350MB 2.5" IDE **£299**
525MB 2.5" IDE **£589**
735MB 2.5" IDE **£759**
270MB 3.5" IDE/SCSI **£199**
350MB 3.5" IDE/SCSI **£239**
540MB 3.5" IDE/SCSI **£279**
1GB 3.5" IDE/SCSI **£599**
2GB 3.5" IDE/SCSI **£999**

OVERDRIVE HD



External PCMCIA HD allows you fit a 3.5" IDE hard drive and included in the pack is the installation software which allows you to configure the drive to your own needs.

OVERDRIVE BARE **£99**
OVERDRIVE 360MB **£259**

M-TEC HD

LOW PRICES



The AT-500 IDE external hard drive for the A500 comes complete with an internal ROM socket so you can switch between a 2.04 and 1.3 ROM without having to open your Amiga casing.

AT-500 BARE **£99**
AT-500 360MB **£259**

SYQUEST DRIVES

Removable storage systems from Syquest.

3.5" 105MB SCSI INTERNAL ..**£279**
3.5" 270MB SCSI INTERNAL ..**£449**
EXTERNAL CASING **£99**
105MB SYQUEST CARTRIDGE .**£55**
270MB SYQUEST CARTRIDGE .**£79**

OPTICAL DRIVE



The award winning 128MB Power Optical

128MB OPTICAL INTERNAL **£639**
230MB OPTICAL INTERNAL **£799**
128MB OPTICAL DISK **£29**
230MB OPTICAL DISK **£39**
SCSI CONTROLLER CARD **£129**

VIDEO BACKUP 3.0

This innovative product allows you to backup your software onto a VHS cassette, so you can store up to 520MB on one four hour tape. Version 3.0 has new backup modes for Amiga's with a 68020 or higher CPU, a new user interface that also runs on the Workbench screen, a two times speed improvement over v1.5, data compression over three times faster than v1.5 and also able to watch television on your 1084s monitor.

VIDEO BACKUP SCART **£65**
VIDEO BACKUP PHONO **£60**
UPGRADE TO V3.0 ....**£20**

DISK EXPANDER

Disk Expander includes the following features:

- Can add up to 50% to your hard drive capacity
- Fast compression and decompression
- Works with all drives including SCSI, IDE, Floppies and even the RAM disk
- Reliable in tests, no data corruption
- Flexible and expandable as new compression libraries are developed
- Once installed the program is transparent to the user
- Works on any Amiga with any Kickstart

DISK EXPANDER **£25**

FLOPPY EXPANDER

Floppy Expander allows you to fit about 1.5MB on a standard floppy drive and an amazing 3MB when used in conjunction with the XL Drive 1.76MB. This is achieved by compressing data 30 - 70% of its original size, which all of this happens automatically.

FLOPPY EXPANDER **£10**

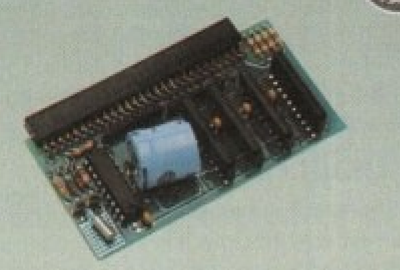
MEGACHIP RAM



Increase your Amiga 500/2000 chip RAM to a total of 2MB. MegaChip does this by using its own 1MB of RAM and drawing extra memory from any other RAM you have installed in your Amiga. No soldering required.

MEGACHIP RAM **£159**

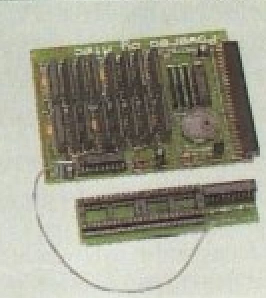
RAM UPGRADES



We manufacture a vast range of memory cards for all the Amiga range of computers.

512K RAM WITH CLOCK **£24**
512K RAM WITHOUT CLOCK ..**£19**
A600 1MB RAM **£34**
A500+ 1MB RAM **£29**

A500 2MB RAM



A 2MB RAM board for the A500 which fits in the trap door slot.

A500 2MB RAM **£90**

WORKBENCH 3.1

Release 2.1/3.1, inc. 2.1/3.1 software and user guides.

2.1 ENHANCER SOFTWARE ...**£49**
ROM SHARE DEVICE **£19**
2.05 ROM CHIP **£25**
3.1 A500/A2000 ....**£85**
3.1 A3000/A4000 ....**£95**

SPECIAL OFFER

2.05 ROM, DISK & MANUAL ..**£59**

POWER SCANNER 4

24-bit



The award winning Power Scanner includes the following features:

- Scan in 24-bit (16.7 million colours) at upto 200DPI (all Amigas, not just AGA)*
- Scan in 256 greyscales at up to 400DPI (all Amigas not justAGA)
- Full control of scanner mode from s/w*
- Thru' port for printer connection
- Fully supports AGA chipset
- Save images in avariety of formats
- Display HAM8/24-bit images on a non-
- AGA Amiga (via image conversion)
- Full editing facilities
- Many image processing functions inc. brightness, colour, contrast, relief, scale
- Add colour to black and white images and even convert them to 24-bit
- Compatible with all Amigas

System Requirements
2.04 ROM or above, Minimum 1MB
Recommended 2MB or above
*Only available on Colour PowerScanner 4

POWERSCAN 4 B/W £99
POWERSCAN 4 COLOUR ...£199
OCR (when purchased with scanner) . . .£20
OCR SOFTWARE £49
POWERSCAN 4 S/W ONLY £20
PC INTERFACE + COLOUR S/W £49
PC INTERFACE + B/WHITE S/W £39

WARP ENGINE

The high speed 040 board you install directly into the CPU slot, not a Zorro III slot!

WARP ENGINE BARE £699
WARP ENGINE 28MHZ £799
WARP ENGINE 33MHZ £899
WARP ENGINE 40MHZ £1099

POWER SUPPLIES

Replacement PSU's for GVP external HD and Overdrive.

POWER SUPPLY £39.95

Beware of external hard drives that use power from the Amiga external floppy port.

EPSON GT-6500



The Epson GT-6500 24-bit colour A4 flatbed scanner has output resolutions up to 1200DPI in 16.7 million colours, greyscale and line art. The GT-6500 comes with software, cables and manual.

GT-6500 POWERSCAN £599
GT-6500 IMAGE FX £689
DOCUMENT FEEDER £399

EPSON STYLUS

720 DPI

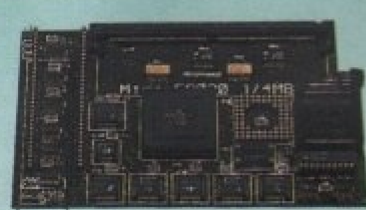


The Epson Stylus colour inkjet prints up to 16 million colours with a maximum resolution of 720DPI. Complete with Studio II software (£49.95 Studio II only).

SPECIAL OFFER
Epson Stylus Inkjet, Data Cable
10 Sheets of 720DPI Paper
10 Sheets of 320DPI Paper
Studio II Software £489

EPSON LQ-300 24-PIN £189
LQ-300 COLOUR KIT £39

A500 68020



Full 68020 processor with MMU
Works with all A500's, A500+
Optional 68881/68882 (PLCC or PGA)
Up to 4MB FAST RAM
Fully auto-configuring
Supports Motorolla cache system
Supports Kickstart remapping
Disable jumper

Not Compatible with GVP Hard drive

68020 A500 BARE £99
68020 A500 4MB £239

POWER

TELEPHONE **01234 273000**

PHONE ORDERS: We accept most major credit cards and are happy to help you with any queries.

POST: Ordering by cheque/PO please make them payable to **Power Computing Ltd** and specify which delivery is required.

WARRANTY: All Power products come with a 12 month warranty unless otherwise specified.

SUPPORT: Help is on hand with a full Technical Backup service which is provided for Power Customers.

PRICES: All prices listed are for month of publication only, please call to confirm prices before ordering.

EXPORT: Most items are available at **Tax Free Prices** to non-EC residents. Call to confirm prices. BFPO orders welcome.

When ordering from other Power adverts please use this order form

Name

Address

PostCode

Telephone

System Owned

Description

Total Amount (inc. delivery) £ ____________

Credit Card No.

Expiry Date **Signature**

Delivery 2 - 3 Days £2.50 ☐ **Next Day £5** ☐ **Sat £10** ☐

Minimum Delivery £2.50 **Allow up to 7 days for cheques to clear**

POWER COMPUTING LTD
44a/b Stanley St. Bedford MK41 7RW
Tel **01234 273000** Fax **01234 352207**

Trade and Educational orders welcome - Worldwide distribution available